# THE FATHER INVOLVEMENT AND NURTURANT FATHERING SCALES: RETROSPECTIVE MEASURES FOR ADOLESCENT AND ADULT CHILDREN

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This study provides preliminary psychometric data for two fathering measures, the existing Nurturant Fathering Scale and the newly developed Father Involvement Scale. Both measures are completed from the adolescent or adult child's retrospective point of view. The Nurturant Fathering Scale assesses the affective quality of fathering that young people perceived while growing up. The Father Involvement Scale assesses the extent to which young adults perceived their fathers to have been involved in different domains of their lives during childhood and adolescence. This study obtained high internal consistency estimates for both the Father Involvement Scale, including both the reported and desired involvement subscales, and the Nurturant Fathering Scale. It is intriguing that the factor structure of the Father Involvement Scale was consistent with Parsons and Bales's instrumental and socioemotional dimensions of fathering and family life. Implications for the study of father involvement and of nurturant fathering are discussed.

**Keywords:** father involvement; nurturant fathering; fathers; measures; scales; reliability; factor analysis

The social revolutions of the 1960s and the 1970s restructured not only the role expectations for women and mothers but also those for men and fathers.

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As a result, new expectations emerged for the role of fathers in their children's development (Parke, 1995). From the mid-1970s to the present, society increasingly has expected fathers to become involved in the lives of their children in a nurturant and caregiving capacity. No longer are fathers regarded simply as instrumental providers and protectors (Parsons & Bales, 1955), but they now also are expected to play an expressive, nurturing role in their children's lives (for a discussion of recent historical changes in the fathering role, see Amato, 1998; Marsiglio, Amato, Day, & Lamb, 2000). Unfortunately, however, advances in the conceptualization and measurement of father involvement and nurturant fathering have lagged behind the changing and expanding role expectations ushered in by the social changes of the 1960s and 1970s. Consequently, there is now—and there always will be—a continuing need for new ways to conceptualize and to measure the attitudes, feelings, and behaviors of the "new" father as new fathers respond to newly changing social expectations and social conditions.

The initiators of the most recent father involvement measurement tradition were Michael Lamb and Joseph Pleck. They conceptualized father involvement in terms of the following three dimensions: direct interaction, accessibility, and ultimate responsibility (Lamb, Pleck, & Levine, 1985). Lamb, Pleck, and their colleagues focused primarily on measuring the amount of time that fathers were involved in their children's lives and largely ignored the nature or content of that involvement. The accomplishments, limitations, and future directions of this research tradition (such as moving into positive father involvement) have been comprehensively summarized by Pleck (1997). Although the groundbreaking work of Lamb and Pleck has brought attention to the time-based measurement of father involvement, it now is clear that there is a need for the study of father involvement to become more multidimensional and multifaceted and to attend to the consequences of diverse aspects of father involvement for children's development (Marsiglio et al., 2000). Perhaps most critically, however, it has become clear that time-based measures are very poor proxies of fathers' impact on children's lives, particularly for nonresidential fathers. Given the current divorce rates for first-time marriages, which hover around 50%, and permanent separation rates, which hover around 17%, it is critical to have measures of father involvement that are impact based rather than time based (Amato, 1998; Amato & Gilbreth, 1999; Finley, 2003). Such measures appear much more likely to gage the contribution (or lack of contribution) of nonresidential fathers to their children's development.

As an alternative to the traditionally time-based conceptualization and measurement of father involvement, Hawkins and Palkovitz (1999) identified many different domains of fathering that are conceptually related to the many different developmental trajectories of children, adolescents, and young adults. These domains include caregiving, providing income, disci-

plining, developing responsibility, and providing companionship, among others. The approach proposed by Hawkins and Palkovitz deviates from the more time-based measurement of father involvement in two ways. First, it encourages the specification of the many different domains of children's lives in which fathers may or may not be engaging their children or attempting to promote some aspect of development when they interact with their children. Second, it allows for the quantification of the perceived level of father involvement (i.e., the degree to which fathers were perceived as being involved in each domain of their children's development).

Hawkins and Palkovitz (1999) have extended the measurement of father involvement to be more multidimensional and to focus more on the content of father-child interactions. They have provided preliminary validation for a measure of father involvement (Hawkins et al., 2002) from fathers' viewpoints. Domains of fathering assessed in their measure include caregiving, being protective, developing responsibility, and sharing activities. However, their approach continues to rely on reports of fathering activities from the father's point of view.

By contrast, this study adopts a child-centered approach emphasizing children's phenomenological perceptions of father involvement. The essence of this approach is that what is important to the children in the long run and what most heavily affects children's current and future behavior is the longterm parent "residue" within the children that is encapsulated within the children's retrospective perceptions of their parents. Thus, if an adolescent or adult child perceived that her father was highly involved in her life, then that father's impact on his child is a consequence of this perception of high involvement—independent of the veridicality of that perception. The phenomenological approach has been used very successfully to study the impact of perceived parental acceptance-rejection on children's emotional, psychosocial, and behavioral development (see Khaleque & Rohner, 2002; Rohner, 1986; and particularly Rohner & Veneziano, 2001, for an extensive review of the cross-cultural and intracultural research focusing on the impact of perceived paternal acceptance-rejection on children). Similar perspectives have been introduced into the literature on family stress (e.g., Boss, 1988) and self-concept (e.g., Harter, 1999). Research supporting these perspectives has demonstrated that individuals' perceptions are uniquely predictive of the experiences that individuals report (e.g., Harter, Whitesell, & Kowalski, 1992; Kaplan & Boss, 1999).

Therefore, the core conceptualizations underlying our phenomenological approach to the study of father involvement are as follows: (a) Father involvement is a highly differentiated construct, and there are many different domains of a child's life in which a father may or may not be involved; (b) what is most important is not the amount of time a father actually spends with his child but rather the child's perception of the father's level of involvement;

(c) the long-term impact that the father has on his child is a function of the child's perception; and (d) one way to measure this long-term impact is to ask adolescent or adult children to retrospectively report on their perceptions of their fathers' involvement and nurturance. Finally, in the applied and practice domains involving children, many decisions regarding children are based on judgments of "the best interests of the child" (Finley, 2002). Only rarely, however, are the best interests of children assessed from the children's points of view. Retrospective instruments may help to tap into this perspective.

Given our phenomenological perspective, two instruments have been developed to measure the child's perception of father nurturance and involvement. The first instrument, the Nurturant Fathering Scale (Finley, 1998; Williams & Finley, 1997) was designed to measure the affective quality of fathering. In large, ethnically diverse samples of adolescents and young adults both in Miami and in Trinidad, the Nurturant Fathering Scale produced high internal consistency estimates (Williams & Finley, 1997) and was positively related to participants' perceptions of parental acceptancerejection (Finley, 1991; Williams, 1995). This scale was developed to challenge a qualitative study by Morris (1988), who concluded that paternal age was negatively related to affective quality of fathering. The second instrument, the Father Involvement Scale, was newly developed for this study and was intended to assess adolescent and adult children's retrospective perceptions of their fathers' involvement in 20 different domains of their lives. The Father Involvement Scale was developed in two steps. First, the domains to be included in the measure were derived from the exceptionally insightful analysis of the father involvement literature provided by Hawkins and Palkovitz (1999). Second, as recommended by Hawkins and Palkovitz, for each domain, items were constructed to assess reported and desired levels of father involvement (one item for reported involvement and one item for desired involvement). The measure was pilot tested on a small group (n = 15)of university students. These students provided feedback on item content and suggested ways in which the items could be reworded to assess the domains of fathering more effectively. Data from these pilot participants were not used in the analyses for this study.

# Method

#### **Participants**

To provide estimates of the factor structures and internal consistency estimates for both the Nurturant Fathering Scale and the Father Involvement Scale across a wide range of participant characteristics, we used a sample diverse in gender, ethnicity, and family form. A total of 2,353 university students (31% male and 69% female) participated in this study. The majority of

respondents (88%) were from Florida International University, whose student body is largely Hispanic. For purposes of diversity, these students were recruited from freshman English (38% of all Florida International University students), introductory psychology (9%), and upper division psychology (53%) classes. To increase the numbers of non-Hispanics in the sample, additional data were gathered at two other universities, Florida State University (family studies courses, 6% of the total sample) and the College of New Jersey (upper division psychology courses, 6% of the total sample), with primarily non-Hispanic White student populations. All surveys were completed in class, and in many classes students received course credit for their participation. The resulting sample was ethnically diverse, with 536 non-Hispanic Whites (23% of the sample), 259 non-Hispanic Blacks (11%), 1,289 Hispanics (55%), 171 Asians (7%), 85 others (4%), and 13 not reporting ethnicity. A total of 70% of participants and 27% of fathers were born in the United States. The primary places of origin for the immigrant participants and fathers were the Caribbean, Central America, and South America. All university grade levels were represented as follows: 45% freshmen, 18% sophomores, 17% juniors, 14% seniors, and 6% graduate or special students. The majority (65%) of participants resided with parents, with 11% living on campus, 14% residing in off-campus houses or apartments, and 10% reporting other living arrangements. In terms of family form, 63% of participants were from married-parent families, 21% were from single-parent divorced families, 2% were from father-deceased families, 6% were from stepfatherheaded families, 1% were from adoptive families, and 2% were from other family forms (5% of participants did not provide family form data).

#### Measures

*Demographics*. Participants were asked to identify the father figure (e.g., biological father, stepfather, or adoptive father) who had the greatest impact on their lives. In this study, 91% of participants rated their biological fathers, 6% rated stepfathers, 1% rated adoptive fathers, and 2% rated other father figures (e.g., grandfathers or uncles).

Participants also reported their age, gender, place of residence, year in school, grade point average, ethnicity, birth order, place of birth, father's place of birth, father's educational level, family income, and family form (intact, father deceased, divorced, adoptive, or stepfamily).

*Nurturant fathering*. The Nurturant Fathering Scale consists of nine items, each rated on a 5-point scale, that participants use to characterize their relationships with the father or father figure selected on the demographic form. Each item is rated on a 5-point scale. Participants are asked to read each item and to respond using a 5-point rating scale (the anchors for the scale vary

as a function of item content). No items are reverse scored. Possible scores on this measure range from 9 to 45. Cronbach's alpha coefficients for scores on the Nurturant Fathering Scale from prior research in Miami (where this study was conducted) and in Trinidad have ranged between .88 and .90 (Finley, 1998; Williams & Finley, 1997). The scale, as administered, is shown in Appendix A. A sample item from this scale is, "When you needed your

father's support, was he there for you?"

Father involvement. Participants were asked to complete the Father Involvement Scale with regard to the father or father figure selected in the demographics section. The Father Involvement Scale lists 20 domains of father involvement (as selected from the review and critique by Hawkins & Palkovitz, 1999). For each fathering domain listed, participants are asked to indicate the following: (a) how involved, on a scale of 1 (not at all involved) to 5 (very involved), their fathers were in their lives and (b) how involved they wanted their fathers to have been, relative to how involved their fathers actually were, on a scale of 1 (much less involved) to 5 (much more involved). No items are reverse scored. Total scores for reported and desired involvement can be created by summing the respective domain ratings. Possible scores for these totals range from 20 to 100. A sample item from this scale reads, \_ developing competence \_\_\_\_\_," for which the participants were instructed to write the reported involvement rating into the lefthand blank and to write the desired involvement rating into the right-hand blank. The Father Involvement Scale, as administered, is shown in Appendix B.

#### Procedure

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Participants completed the Nurturant Fathering Scale and the Father Involvement Scale in class. Research assistants administered the two measures and demographic form as a single questionnaire. The administration time for the entire assessment ranged from 10 to 20 minutes.

# Results

# Data Analytic Strategy

Factor-analytic methods were used to identify the underlying latent components (i.e., subscales) of fathering assessed by the Nurturant Fathering Scale and the Father Involvement Scale. Separate exploratory factor analyses with varimax rotations were conducted on the Nurturant Fathering Scale items, the Father Involvement Scale Reported Involvement items, and the Father Involvement Scale Desired Involvement items. Reported and desired

involvement were analyzed separately primarily because the respective response scales were conceptually distinct. The response scale for the reported involvement items appears to be linear in that the progression from never involved (1) to sometimes involved (3) to always involved (5) represents movement in a single direction (i.e., increasing involvement). Conversely, the response scale for the desired involvement items appears to be curvilinear in that it was just right (3) appears to reflect a greater degree of contentment and satisfaction with the reported level of involvement than does either much less involved (1) or much more involved (5).

These exploratory factor analyses were conducted using SPSS for Windows release 10.0. Varimax rotation was selected because it (a) extracts independent and orthogonal underlying factors and (b) simplifies interpretation of the factor solution by minimizing the number of variables that are highly associated with each factor (Kim & Mueller, 1979).

For each set of items, each factor extracted from analysis was construed to represent a subscale. Factor extraction was based on two criteria. First, the postrotation trace (i.e., rotated eigenvalue) for a given factor must have exceeded 1.00, and second, the postrotation trace must have exceeded the postrotation trace for a parallel factor derived from a principal components analysis of random numbers (Thompson & Daniel, 1996). That is, each extracted factor must have been reliable and must have exceeded the variance accounted for by chance. Within each analysis, factor pattern coefficients with absolute values greater than or equal to .50, representing 25% shared variance with the factor, were considered indicative of a strong association between the item and the factor.

For analyses in which more than one factor emerged, items loading highly (i.e., absolute value of .50 or greater) on more than one factor were placed together into a separate subscale. This was done because items double loading were construed to be qualitatively different from items loading principally on only one factor (i.e., they could be viewed as possessing the qualities of both factors rather than of only one).

All exploratory factor analyses were replicated using confirmatory factor analyses. These confirmatory factor analyses were conducted using AMOS release 4.0. Within each set of confirmatory factor analyses, comparative fit statistics were calculated for one- and two-factor solutions. In the event that double-loaded subscales were created in any of the exploratory factor analyses, confirmatory factor analysis models were estimated using (a) a one-factor model, (b) a two-factor model with the double-loaded items placed with both primary factors, and (c) a three-factor model with the double-loaded items grouped as a separate factor. The comparative fit index (CFI) and root mean square error of approximation (RMSEA) indices were used to evaluate model fit; the chi-square statistic is reported but is not used in interpretation because it is vulnerable to inflation with large sample sizes

(Kline, 1998). Chi-square values were used only to evaluate comparative fit between or among models. Within each set of items (nurturant fathering, reported involvement, and desired involvement), chi-square difference tests were conducted among all available models to identify the model providing the best fit to the data. Once this best fitting solution was identified, the sample was randomly split in half (using the random case selection procedure in SPSS) and the best fitting model was re-estimated on each half of the sample. Invariance analyses, in the form of chi-square difference tests between constrained and unconstrained models, were conducted to ascertain whether the model was reliable across the two halves of the sample.

Descriptive statistics were then computed for all factors extracted. Finally, to ascertain the discriminant validity of the factorially derived scales, a correlation matrix was computed. This correlation matrix was then replicated using a confirmatory factor analysis.

#### Factor Analyses

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Nurturant fathering. An exploratory factor analysis of the Nurturant Fathering Scale items produced a single factor (eigenvalue = 6.24) accounting for 69.4% of variability. All nine items loaded on this factor at .76 or higher, and effect sizes ranged from .57 to .83 (see Table 1). A confirmatory factor analysis of this one-factor solution produced an adequate fit to the data,  $\chi^2(27) = 776.03$ , p < .001, CFI = .99, RMcSEA = .11. Factor pattern coefficients were high for all items, with effect sizes ranging from .50 to .85 (see Table 1). In addition, invariance analyses indicated that the single factor was reliable between randomly selected halves of the sample,  $\chi^2(8) = 4.70$ , not significant. Thus, a single scale was created to represent the Nurturant Fathering Scale items. The Cronbach's alpha for scores on this scale was .94.

Reported father involvement. An exploratory factor analysis of the reported father involvement items produced two factors. Factor I (postrotation trace = 6.81) explained 34.1% of variance and was uniquely associated with the emotional, social, spiritual, physical, leisure, activities, caregiving, and companionship domains. Factor II (postrotation trace = 6.47) explained 32.4% of variance and was uniquely associated with the ethical, career, responsibility, independence, income, protecting, discipline, and school domains. Four domains (intellectual, competence, mentoring, and advising) patterned onto both factors. Effect sizes ranged from .46 to .79 for items loading on expressive involvement, from .50 to .78 for items loading on instrumental involvement, and from .65 to .72 for items loading on both factors.

The following three confirmatory factor analysis models were evaluated for the reported involvement items: (a) a one-factor solution where all items

Table 1
Factor Analysis of the Nurturant Fathering Scale Items

Item	Factor Patter	rn Coefficient	1	$\eta^2$
Overall, how would you <i>rate</i> your father?	.91	(.92)	.83	(.85)
When you needed your father's <i>support</i> ,				
was he there for you?	.89	(.89)	.79	(.79)
How emotionally <i>close</i> were you to your father?	.84	(.80)	.71	(.64)
How much do you think your father <i>enjoyed</i>				
being a father?	.84	(.83)	.70	(.69)
Did your father have enough <i>energy</i> to meet				
your needs?	.83	(.81)	.69	(.66)
Was your father available to spend <i>time</i> with				
you in activities?	.83	(.80)	.69	(.64)
Did you feel that you could confide in your father	r? .80	(.76)	.65	(.58)
When you were a <i>teenager</i> , how well did you				
get along with your father?	.79	(.75)	.63	(.56)
As you go through your day, how much of a				
psychological presence does your father				
have in your daily thoughts and feelings?	.76	(.71)	.57	(.50)

Note: Factor pattern coefficients and effect sizes from confirmatory factor analyses are in parentheses.

were placed onto a single factor, (b) a two-factor solution where doubleloading items were placed onto both factors, and (c) a three-factor solution where double-loading items were conceptualized as a separate factor. Comparative fit analyses indicated that the one-factor model (CFI = .97, RMSEA = .11) provided a significantly worse fit to the data than did either the twofactor model,  $\Delta \chi^2(5) = 1,432.80, p < .001$ , or the three-factor model,  $\Delta \chi^2(3) =$ 1,399.42, p < .001. Although the fit indices for the two- and three-factor solutions were identical (CFI = .98, RMSEA = .09), the two-factor solution provided a significantly better fit to the data,  $\Delta \chi^2(2) = 33.39$ , p < .001. However, invariance analyses revealed that the three-factor solution,  $\Delta \chi^2(20) = 14.18$ , not significant, but not the two-factor solution,  $\Delta \chi^2(18) = 190.07$ , p < .001, fit comparably in both half samples. Therefore, given the unreliability of the two-factor solution and the identical fit statistics between the two- and threefactor solutions, the three-factor solution was retained,  $\chi^2(167) = 3,288.15$ , p < .001. Effect sizes ranged from .42 to .77 for items loading on expressive involvement, from .40 to .72 for items loading on instrumental involvement, and from .64 to .72 for items loading on both factors.

As a result, three subscales were created on the basis of these factor analytic results. The items loading uniquely on Factor I were assigned to an Expressive Involvement subscale, those loading uniquely on Factor II were assigned to an Instrumental Involvement subscale, and those loading on both

factors were assigned to a Mentoring/Advising Involvement subscale (see Table 2). Internal consistency tests revealed high Cronbach's alphas for scores on all three subscales and for the total reported father involvement score: Expressive Involvement = .93, Instrumental Involvement = .91, Mentoring/Advising Involvement = .90; and Total Involvement = .97.

Desired father involvement. An exploratory factor analysis of the desired father involvement items also produced two factors. Factor I (postrotation trace = 6.33) accounted for 31.6% of variance and was uniquely associated with the intellectual, emotional, social, spiritual, physical, leisure, activities, mentoring, caregiving, school, and companionship domains. Factor II (postrotation trace = 5.88) accounted for 29.4% of variance and was uniquely associated with the ethical, career, responsibility, independence, competence, income, protecting, advising, and discipline domains. No items loaded significantly on both factors. Effect sizes ranged from .40 to .72 for items loading on expressive desired involvement and from .48 to .73 for items loading on instrumental desired involvement.

A confirmatory factor analysis of the desired father involvement items indicated that a two-factor solution (CFI = .98, RMSEA = .08) provided a significantly better fit to the data than did a one-factor solution (CFI = .98, RMSEA = .10),  $\Delta\chi^2(1) = 1,082.58$ , p < .001. Invariance analyses conducted on the two-factor solution indicated that the model was reliable across half samples,  $\Delta\chi^2(18) = 10.47$ , not significant. Therefore, the two-factor solution was retained,  $\chi^2(169) = 2,996.07$ , p < .001. Effect sizes ranged from .36 to .67 for items loading on expressive involvement and from .44 to .70 for items loading on instrumental involvement.

Two subscales were created based on these factor analytic results. The items loading on Factor I were grouped into an Expressive Desired Involvement subscale, and those loading on Factor II were grouped into an Instrumental Desired Involvement subscale (see Table 2). Scores on these subscales and on the total scale comprising all the items were highly internally consistent as measured by the following Cronbach's alphas: Expressive Desired Involvement = .93, Instrumental Desired Involvement = .92, and Total Desired Involvement = .96.

# Descriptive Statistics

Descriptive statistics for all factorially derived subscales, as well as for the reported and desired involvement total scores, are displayed in Table 3. In each case, the full range of possible scores was represented in the distribution of observed scores.

Table 2
Factor Analyses of the Father Involvement Scale Items

Item	Factor I (Expressive)	Factor II (Instrumental)	$\eta^2$	
Reported father involvement items			· ·	
Expressive				
Leisure, fun, play	.82 (.80)	.25	.73 (.64)	
Companionship	.80 (.88)	.39	.79 (.77)	
Sharing activities/interests	.80 (.84)	.35	.76 (.71)	
Emotional development	.78 (.84)	.36	.74 (.71)	
Social development	.73 (.81)	.39	.69 (.66)	
Caregiving	.68 (.85)	.49	.73 (.72)	
Physical development	.67 (.74)	.38	.59 (.55)	
Spiritual development	.55 (.65)	.39	.46 (.42)	
Instrumental	.55 (.05)	.57	.40 (.42)	
Developing responsibility	.37	.80 (.85)	.78 (.72)	
Discipline	.19	.79 (.70)	.67 (.49)	
Ethical/moral development	.45	.69 (.80)	.68 (.64)	
Providing income	.24	.67 (.63)	.50 (.40)	
Being protective	.44	.65 (.76)	.62 (.58)	
Career development	.47	.63 (.77)	.62 (.59)	
Developing independence	.48	.60 (.76)	.59 (.58)	
School or homework	.47	.58 (.73)	.56 (.53)	
Mentoring/advising	,	.50 (.75)	.50 (.55)	
Developing competence <sup>a</sup>	.52	.67	.72 (.72)	
Mentoring/teaching <sup>a</sup>	.61	.58	.72 (.72)	
Advising <sup>a</sup>	.54	.65	.71 (.71)	
Intellectual development <sup>a</sup>	.51	.62	.65 (.64)	
Desired father involvement items		.02	.02 (.0.)	
Expressive				
Sharing activities/interests	.81 (.80)	.26	.72 (.64)	
Leisure, fun, play	.79 (.74)	.20	.67 (.55)	
Companionship	.79 (.82)	.32	.72 (.67)	
Emotional development	.74 (.76)	.29	.64 (.58)	
Mentoring and/or teaching	.69 (.81)	.45	.67 (.66)	
Social development	.69 (.75)	.37	.61 (.56)	
Caregiving	.67 (.81)	.45	.66 (.66)	
Intellectual development	.57 (.74)	.49	.59 (.55)	
Spiritual development	.55 (.60)	.32	.40 (.36)	
Physical development	.53 (.68)	.46	.49 (.46)	
Instrumental			(1.0)	
Discipline	.13	.80 (.68)	.66 (.46)	
Developing responsibility	.34	.78 (.82)	.73 (.67)	
Being protective	.26	.75 (.71)	.63 (.50)	
Developing competence	.49	.68 (.84)	.70 (.70)	
Developing independence	.36	.66 (.74)	.56 (.55)	
Advising	.49	.63 (.78)	.64 (.60)	
Ethical/moral development	.46	.63 (.76)	.61 (.58)	
Providing income	.33	.61 (.66)	.48 (.44)	
Career development	.44	.60 (.73)	.56 (.53)	
School or homework	.48	.50 (.67)	.48 (.45)	

*Note:* Factor pattern coefficients and effect sizes from confirmatory factor analyses are in parentheses. a. Confirmatory factor pattern coefficients are not displayed because the item was assigned to a third factor in the confirmatory factor analysis.

#### EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT

Table 3
Descriptive Statistics for Nurturant Fathering, Reported Involvement, and Desired Involvement

Variable	M	ean	Standard	Deviation	Range
Nurturant fathering	33.26	(3.70)	9.02	(3.01)	9 to 45
Reported father involvement					
Total score	72.03	(3.60)	20.27	(4.53)	20 to 100
Expressive	26.68	(3.28)	8.68	(3.07)	8 to 40
Instrumental	30.74	(3.84)	8.07	(2.85)	8 to 40
Mentoring/advising	14.64	(3.66)	4.55	(2.28)	4 to 20
Desired father involvement					
Total score	69.85	(3.49)	13.60	(3.04)	20 to 100
Expressive	36.04	(3.60)	7.05	(2.23)	10 to 50
Instrumental	33.82	(3.38)	7.18	(2.27)	10 to 50

Note: Statistics for item-mean scores are in parentheses.

# Interrelationships Among Nurturant Fathering, Reported Father Involvement, and Desired Father Involvement

The factor pattern matrices suggested a considerable degree of overlap between the pairs of factors extracted in the exploratory factor analyses. Therefore, it appeared necessary to ascertain the discriminant validity of the various fathering measures reported in this article (nurturant fathering, the three reported involvement subscales, and the two desired involvement subscales). Discriminant validity was examined in two steps. First, a correlation matrix was computed among the nurturant fathering, reported involvement, and desired involvement measures. The Nurturant Fathering Scale was closely related to all measures of reported father involvement. Contrary to what one would expect, however, desired father involvement was only modestly and negatively related to the Nurturant Fathering Scale and to the reported Father Involvement subscale (see Table 3).

Second, a confirmatory factor analysis model was estimated based on the results of the correlational analyses. Given the low intercorrelations of the desired involvement subscales with nurturant fathering and with the reported involvement subscales, a two-factor solution was estimated. The first factor was linked with nurturant fathering and with reported involvement, and the second factor was linked with desired involvement. Although the CFI for this model (.98) indicated good model fit, the RMSEA index was quite high (.21), indicating a considerable amount of misspecification. To isolate the source of the misspecification, we decomposed the model and estimated a one-factor solution for nurturant fathering and reported involvement (a separate model could not be estimated for desired involvement because it would have con-

tained only two indicators). The model containing nurturant fathering and reported involvement was associated with a high CFI value (.99), but again, the RMSEA value was extremely high (.30). This elevated RMSEA value suggested that the Nurturant Fathering Scale and the subscales of the Father Involvement Scale could not be collapsed into a single factor. This finding provides some evidence for the discriminant validity of the Nurturant Fathering, Expressive Involvement, Instrumental Involvement, and Mentoring/Advising subscales. Although the high intercorrelations clearly show that the subscales are measuring something in common, the high RMSEA value may be indicative of variance uniquely attributable to each subscale (see Table 4).

#### Discussion

Our goal was to investigate the feasibility of assessing father involvement and nurturant fathering from the adolescent or adult child's retrospective point of view. Such phenomenological measures have the potential to tap into the child's lifelong, encapsulated perceptions of the father as well as to permit research into the effects of those perceptions on the youth's current psychosocial functioning. Thus, the factor structures and internal consistency reliability of scores obtained from two new measures of fathering were investigated.

The results of this study provide additional evidence for the validity and reliability of scores obtained using the Nurturant Fathering Scale and begin to provide evidence for the psychometric properties of the Father Involvement Scale. The high Cronbach's alpha values for all subscales from the Nurturant Fathering Scale and from the Father Involvement Scale suggest that these measures may provide reliable and internally consistent ratings of nurturant fathering and of father involvement in a number of conceptually important content domains. Moreover, the factor analytic results indicate that despite the high intercorrelations among the items within the reported and desired father involvement clusters (and between the Nurturant Fathering Scale and the Father Involvement Scale clusters), two independent factors could be extracted from each set of items. These factors appear to represent conceptually distinct aspects of fathering, namely, expressive and instrumental involvement. Furthermore, in the reported involvement analysis, a third dimension emerged, drawing on both the expressive and instrumental dimensions. Although it is possible that this partitioning is artificial in light of the high correlations between both pairs of subscales and in light of the extremely high Cronbach's alpha value for the overall father involvement score, the results of the confirmatory factor analyses suggest the presence of distinct dimensions of fathering. The expressive-instrumental distinction may be a useful tool in future father involvement research and thus is important to retain. It is intriguing that the two primary dimensions of father

Table 4 Correlations Among the Nurturant Fathering Scale and Father Involvement Scale Measures

Scale	Reported Expressive Involvement	Reported Instrumental Involvement	Reported Mentoring/ Advising Involvement	Desired Expressive Involvement	Desired Instrumental Involvement
Nurturant Fathering scale Reported Expressive Involvement Reported Instrumental Involvement Reported Mentoring and/or Advising Involvement Desired Expressive Involvement	.89 $(r^2 = .79)$	.83 $(r^2 = .69)$ .84 $(r^2 = .71)$	.83 $(r^2 = .63)$ .84 $(r^2 = .71)$ .89 $(r^2 = .79)$	$-36   (r^2 = .13)$ $35   (r^2 = .12)$ $32   (r^2 = .10)$ $33   (r^2 = .11)$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

involvement extracted from the factor analyses in this study are theoretically consistent with the two family dimensions—instrumental and socioemotional—originally introduced by Parsons and Bales (1955) nearly 50 years ago.

The analyses of interrelationships between the Nurturant Fathering and Father Involvement Scales also provide some psychometric evidence for the Father Involvement Scale. That nurturant fathering ratings demonstrated a high degree of interrelationship with all three reported father involvement scales provides evidence for the convergent validity of Father Involvement Scale scores. Specifically, the strong interrelationships between nurturant fathering and the three dimensions of reported father involvement suggest that although the expressive and instrumental dimensions of fathering (as well as the mentoring/advising dimension representing their overlap) are thought to be somewhat distinct, they both may be underlain by nurturance and support as expressed by the father and perceived by the child. In other words, different fathers may express nurturance in different ways (e.g., protecting, schoolwork, sports, board games, or long walks), any or all of which children may perceive as nurturant.

On the other hand, the results of the confirmatory factor analysis using the Nurturant Fathering Scale and the factors extracted from the Father Involvement Scale provide evidence for the discriminant validity of scores obtained using the fathering scales used in this study. Specifically, the fairly high degree of model misspecification suggests that nurturant fathering, expressive involvement, instrumental involvement, and mentoring and/or advising involvement cannot be collapsed into a single index. These results further support the expressive-instrumental distinction within the Father Involvement Scale, as well as the use of nurturance as an additional index of fathering. Additional research is needed to determine the extent to which the variability uniquely attributed to each scale will facilitate the investigation of differential contributions that fathers (and mothers) may make to their children's developmental outcomes.

The variations between the reported and desired father involvement factor structures also warrant discussion. It is noteworthy that there was overlap between the items loading on the reported expressive and instrumental fathering factors but that there was no overlap between the items loading on the desired expressive and instrumental fathering factors (i.e., the Mentoring/Advising subscale emerged within the reported father involvement items but not within the desired father involvement items). The likely reason for this involves differences in the response scales for the two sets of items. The reported involvement response scale is clearly linear (i.e., 1 reflects extremely low involvement and 5 reflects extremely high involvement). Conversely, the response scale for the desired involvement items may be curvilinear because the *it was just right* (3) alternative anchored the center of

this scale. Participants reporting extremely low levels of father involvement were most likely to indicate a desire for much more involvement (a rating of 5), whereas participants reporting extremely high levels of father involvement were most likely to indicate that the degree of involvement experienced was "just right" (a rating of 3). On the desired involvement items, ratings of 1 or 2 were statistically significantly less common than were higher ratings,  $\chi^2(1) = 2,012.24, p < .001$ . Moreover, the relationships between reported and desired involvement varied considerably as a function of participants' desired involvement levels. For participants providing low ratings (i.e., 1 or 2) for desired involvement, the relationship between reported and desired involvement was positive (expressive, r[44] = .60, p < .001; instrumental, r[82] = .80, p < .001). However, for participants providing higher ratings (i.e., 3, 4, or 5) for desired involvement, the relationship between reported and desired involvement was negative (expressive, r[2,245] = -.48, p < .001; instrumental, r[2,205] = -.45, p < .001). Both of these correlation differences were highly statistically significant (expressive, z = 7.72, p < .001; instrumental, z = 13.83, p < .001). The moderate negative correlations found in the entire sample between reported and desired involvement are clearly a

#### Limitations

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There are at least two important limitations to this study aside from the high intercorrelations among the father nurturant and involvement scales discussed previously. First, a prerequisite for using the Father Involvement and Nurturant Fathering scales is the acceptance of the phenomenological perspective. Researchers, practitioners, and policy makers who do not subscribe to this perspective likely will find these scales to be of little use.

function of aggregating these contrasting sets of relationships.

Second, the present sample serves simultaneously as a limitation and as an advantage. The nonrepresentativeness of the sample may be an important potential limitation. A total of 75% of the fathers rated (and 30% of young adult participants) were immigrants, and Hispanics were overrepresented in the sample (55%). Previous research suggests that Hispanic fathers may be more highly involved with their children than are non-Hispanic White or African American fathers (Toth & Xu, 1999). However, the extent to which the interrelationships among fathering dimensions vary by ethnicity or immigrant status has not been studied. Therefore, although the present sample is diverse in terms of ethnicity and national origin, the extent to which the findings can be generalized to mainstream American populations is not known.

As an advantage, the ethnic diversity of the sample may help us to understand how fathering may manifest itself in the future as the demography of the American population changes. According to the most recent census data, 12% of all U.S. residents are foreign born and 23% were raised by foreign-

born parents (Lollock, 2001). Hispanics are disproportionally represented among the foreign-born population, comprising more than 50% of current immigrants to the United States (Therrien & Ramirez, 2000). In addition, 8 of the top 10 countries of birth for immigrants arriving in the United States between 1990 and 2000 were located in Latin America, Asia, and the Caribbean (Schmidley & Deardorff, 2001). In this light, the present sample may be advantageous in that some scholars (e.g., Rohner & Veneziano, 2001) have called for more research on fathering in non-White minority groups in the United States.

#### Conclusions and Implications for Future Research

The potential value of these instruments is at least sixfold. First, perhaps the greatest value of these instruments is that they can be used to compare both residential and nonresidential fathers. Time-based measures are clearly inappropriate to make these types of comparisons (Amato & Gilbreth, 1999) given that the amount of time spent between nonresidential fathers and their children is often beyond the control of either party. Moreover, the instruments used in this study may permit examination of the long-term impact of nonresidential fathers on their children's lives, a topic that is extremely salient given the current high divorce and permanent separation rates.

Second, the measures permit us to move beyond the counting of seconds, minutes, and hours of fathers' involvement with their children reported with an uncertain degree of accuracy by either fathers or mothers. The results of this study demonstrate that it is possible to construct a highly internally consistent measurement of children's perceptions of their fathers' involvement in many different domains of their lives. Following Hawkins and Palkovitz (1999), the measures allow us to assess adult children's long-term perception of their fathers' involvement and of nurturant fathering.

Third, the Nurturant Fathering Scale offers a "new look" in fathering research by providing a measure of adolescents' or adult children's perceptions of their fathers as nurturing parents. Although the traditional role of the father was prescribed to be primarily instrumental (Parsons & Bales, 1955), research on father-child relations since the mid 1970s has emphasized a more nurturing role for fathers (Amato, 1998).

Fourth, instruments such as the Father Involvement Scale and the Nurturant Fathering Scale permit us to examine adolescent and adult children's long-term retrospective perceptions of their fathers' involvement in their lives. It is this long-run impact of father involvement that determines the "best interests of the child" (Finley, 2002) from children's points of view and that is most important both to the children and to society (Khaleque & Rohner, 2002; Lamb, 1997; Rohner, 1986). From a phenomenological perspective, it is precisely this perception of fathers' long-term involvement in

their children's lives that embodies the impact of father involvement on children. These instruments provide a glimpse into children's perceptions of their own best interests in terms of their relationships with their fathers (Finley, 2003).

Fifth, the instrument permits us to look at the content or structure of father involvement (i.e., underlying dimensions or forms) by examining father involvement in many different domains of children's lives. Even the proponents of time-based measures of father involvement have moved from content-free measures to the measurement of positive father involvement (Pleck, 1997), thereby acknowledging the importance of examining the quality and content of father-child interactions.

Sixth, the instrument has the potential to contribute to one currently controversial issue in fatherhood research: whether fathers are "essential" in their children's lives (Silverstein & Auerbach, 1999). Although it would appear intuitively obvious that father involvement would be associated with positive outcomes for children, the issue remains controversial (Amato, 1998; Amato & Gilbreth, 1999; Marsiglio et al., 2000). Examining the long-term consequences of father involvement and of father uninvolvement has the potential to address this highly important issue. If maternal involvement also is assessed, looking at the long-term impact of father and mother involvement—in many different domains of children's lives and from children's points of view—may have the potential to yield data that can help to resolve this as well as other outstanding issues.

# Appendix A Nurturant Fathering Scale

1. How much do you think your father <i>enjoyed</i> being a father?
A great deal
Very much
Somewhat
A little
Not at all
2. When you needed your father's <i>support</i> , was he there for you?
Always there for me
Often there for me
Sometimes there for me
Rarely there for me
Never there for me
3. Did your father have enough <i>energy</i> to meet your needs?
Always
Often
Sometimes

# FINLEY AND SCHWARTZ

Rarely
Never
. Did you feel that you could <i>confide in</i> (talk about important personal things with) our father?
Always
Often
Sometimes
Rarely
Never
. Was your father available to spend <i>time</i> with you in activities?
Always
Often
Sometimes
Rarely Never
. How emotionally <i>close</i> were you to your father?
Extremely close
Very close
Somewhat close
A little close
Not at all close
When you were an <i>adolescent</i> (teenager), how well did you get along with your ather?
Very well
Well
Ok
Poorly
Very poorly
. Overall, how would you <i>rate</i> your father?
Outstanding
Very good
Good
Fair Poor
As you go through your day, how much of a <i>psychological presence</i> does your faher have in your daily thoughts and feelings?
Always there
Often there
Sometimes there
Rarely there
Never there

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# Appendix B Father Involvement Scale

How <i>involved</i> was your father in the following aspects of your life and	What <i>did you want</i> your father's level of involvement to be compared
development?	with what it actually was?
Please place the appropriate number on the line <i>before</i> each of the following items.	Please place the appropriate number on the line <i>after</i> each of the following items.
5. Always involved	5. Much more involved
4. Often involved	4. A little more involved
3. Sometimes involved	3. It was just right
2. Rarely involved	2. A little less involved
1. Never involved	1. Much less involved
Intellectual develop	ment
Emotional developm	nent
Social development	
Ethical/moral development	
Spiritual development	
Physical developme	nt
Career development	<u></u>
Developing respons	ibility
Developing indepen	dence
Developing compete	ence
Leisure, fun, play _	
Providing income	
Sharing activities/in	
Mentoring/teaching	
Caregiving	
Being protective	
Advising	
Discipline	
School/homework	
Companionship	

# Note

<sup>1.</sup> Participants' reports of childhood father contact, which was assessed in the Trinidad study but not in the Miami study, were also positively related to scores on the Nurturant Fathering Scale.

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