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Latent Profiles of Postdivorce Parenting Time, Conflict, and Quality: Children's Adjustment Associations

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Abstract

Parenting time, interparental conflict, and the quality of parenting a child experiences in the postdivorce family environment have complex relations with child adjustment outcomes. Using person-centered latent profile analyses, the present study examined (a) separate profiles of mothers' (N = 472) and fathers' (N = 353) parenting time, interparental conflict, and quality of parenting following divorce; and (b) associations of mother and father profiles with concurrent child outcomes (48% female, 3- to 18-years-old) as well as child outcomes 3 and 10 months later. Mother and father profiles were primarily differentiated by levels of parenting time and quality of parenting, respectively. Mother and father profiles defined by greater parenting time and lower quality parenting were associated with the poorest child outcomes.

Keywords

child adjustment; conflict; latent profile analysis; parenting; parenting time

Over the last 15 years, children's living arrangements following divorce have been characterized by a dramatic increase in shared parenting time between mothers and fathers and a small but significant increase in father's sole residential living arrangements (Cancian, Meyer, Brown, & Cook, 2014; Smyth, McIntosh, Emery, & Higgs Howarth, 2016). The increase in fathers' parenting time is accompanied by an increased need for research on the impact of parenting time on children's postdivorce adjustment (Nielsen, 2013). In addition, interparental conflict is associated with both quality of parenting and children's adjustment

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(e.g., Erel & Burman, 1995), and differential levels of parenting are evident in mothers and fathers (e.g., Simons & Conger, 2007). Thus, in the postdivorce family it is important to assess the quality of mothers' and fathers' parenting relative to interparental conflict and parenting time. The purpose of the current study is to examine the relation between parenting time, interparental conflict, and parenting quality in predicting concurrent and longitudinal child adjustment in divorced and separated mothers and fathers. In the current study we characterize parent-level behavior using a person-centered approach, latent profile analysis.

Parenting in Mothers and Fathers

Family systems theory proposes that a holistic examination inclusive of multiple systems, such as marital and parent–child relationships, is important in understanding child adjustment (Cox & Paley, 2003). Embedded within this theory, the spillover hypothesis proposes that the negative emotions arising from interparental conflict can lead to poorer parenting (Erel & Burman, 1995). Following divorce, the impact of interparental conflict and quality of parenting on children's adjustment is likely qualified by the amount of time a parent spends with his or her child. Yet specific patterns of parenting, interparental conflict, and parenting time relative to child adjustment have yet to be examined in both mothers and fathers following divorce.

Research in two-parent families illustrates clear differences in mothers' versus fathers' parenting. In childhood, mothers interact more frequently and exhibit greater warmth and monitoring with children compared to fathers, whereas some research reports that fathers display more consistent discipline compared to mothers (e.g., Lewis & Lamb, 2003; Putnick et al., 2012). In adolescence, within-family differences in mother and father parenting styles have been observed and, in turn, these differences impact upon child adjustment (McKinney & Renk, 2008; Simons & Conger, 2007). In more recent years there has been a trend for greater involvement and quality of parenting in fathers (Fagan, Day, Lamb, & Cabrera, 2014). Further, some research has found that the presence of interparental conflict is primarily associated with poorer parenting in fathers versus mothers (Coiro & Emery, 1998; Elam, Chassin, Eisenberg, & Spinrad, 2017). Thus, evidence exists that mothers' and fathers' parenting is different. However, in divorced and separated families these associations can be qualified by the amount of time children spend with their mother and father.

Parenting Time, Parenting Quality, and Interparental Conflict in Children's Postdivorce Adjustment

Prior research indicates that the positive quality of mothers' parenting and the family environment following divorce, including acceptance, communication, consistent discipline, support, and regular family routines, are consistently associated with fewer child adjustment problems (see Sandler et al., 2012 for a review). Research on divorced fathers' parenting has also consistently shown that a positive quality of father–child relationship is related to better child postdivorce adjustment (King & Sobolewski, 2006; Menning, 2006; Sandler, Wheeler, & Braver, 2013). Further, the effect of mothers' and fathers' parenting on children's

postdivorce outcomes is present even after controlling for interparental conflict and parenting time (Sandler et al., 2012). Despite considerable research on the relations between parenting time of divorced fathers and children's adjustment, studies have yielded inconsistent findings, such that greater parenting time is not always beneficial (see Smyth et al., 2016 for a review). The relation between father–child relationship quality and children's adjustment may be qualified by parenting time, which most studies do not consider (see Nielsen, 2013 for a review). Additionally, the majority of research in divorced samples involves children residing with their mothers but nonresidential fathers, which is strongly related to the amount of time spent with each parent. Currently there are trends for changing statutory provisions which are designed to maximize both parents' parenting time following divorce, both of which lead to children's varying exposure to mother's and father's parenting (Cancian et al., 2014; Parenting Plans, 2013; Smyth et al., 2016). Given these increases in shared parenting time following divorce it is important to examine differences in parenting across gender and varying levels of parenting time in children's adjustment postdivorce.

A third interrelated factor is the level of interparental conflict in the family which can directly affect children's adjustment through the amount of time they spend with their parent but also indirectly through parenting. Research has consistently found that interparental conflict following divorce is related to poorer child adjustment (e.g., Adamsons & Johnson, 2013; Amato & Rezac, 1994; Dunn, O'Connor, & Cheng, 2005). However, research has also found that conflict is inversely correlated with the quality of parent-child relationships and amount of time parents have with their children. For example, meta-analyses indicate that interparental conflict is associated with poorer parenting behavior for both mothers and fathers (Krishnakumar & Buehler, 2000). Some research finds that higher interparental conflict is associated with lower levels of father-child parenting time and higher levels of mother-child parenting time (Sandler et al., 2013). Although some research has found that under conditions of high conflict more paternal parenting time is associated with lower levels of child problems (Fabricius & Luecken, 2007; Fabricius, Sokol, Diaz, & Braver, 2012), others have found that higher paternal parenting time is related to poorer child adjustment (e.g., Amato & Rezac, 1994) or was not significantly related to child adjustment (Sandler et al., 2013). Other studies find complex interactions of interparental conflict and quality of parenting in predicting children's postdivorce adjustment. One study found that higher maternal or paternal warmth was related to better child adjustment in the context of high interparental conflict and low warmth by the other parent (Sandler, Miles, Cookston, & Braver, 2008). Although parenting time, interparental conflict, and parenting quality are intricately interrelated following divorce the majority of studies have examined these interrelations using variable-centered methods which fail to capture individual patterns of parent behavior.

Capturing Heterogeneity in Parenting Time, Parenting Quality, and Interparental Conflict

Researchers have primarily used three approaches to disentangle the effects of these constructs on children's adjustment. One approach is to investigate the relations between quality of parenting and child adjustment statistically controlling for other factors (Sandler

et al., 2012). A second approach is to investigate conditional or interactive relations between parenting time, quality of parenting, and interparental conflict with children's postdivorce adjustment (e.g., Sandler et al., 2008, 2013). Studies have examined these types of associations using a variable-centered approach. Multiple regression techniques collapse variance across individuals to examine how variability in a construct (e.g., parenting) relates to variability in another construct (e.g., children's adjustment). Although this approach is useful, it fails to consider a parent's unique constellation of behaviors, how these behaviors may differ across mothers and fathers, and their relation to child outcomes.

An alternative person-oriented approach is to identify distinct patterns of variables to empirically form respective groups of mothers and fathers who share similar profiles of parenting time, quality of parenting, and interparental conflict, and to assess differences in children's adjustment problems across the distinct profiles (Elam, Sandler, Wolchik, & Tein, 2016; Modecki, Hagan, Sandler, & Wolchik, 2015). Latent profile analysis, which takes a typology-based view of parenting behavior (Baumrind, 1991), can be used to identify groupings of individuals (mothers, fathers) who exhibit similar patterns or profiles of behavior, which provides a more holistic view of how parents behave. In turn, children's adjustment can be examined relative to mothers' and fathers' profiles clarifying how different patterns of parenting influence children's outcomes.

To date, two studies have examined parenting time, parenting quality, and interparental conflict following divorce using person-oriented latent profile analysis and predicted children's adjustment using parent profiles. Modecki et al. (2015) identified three profiles of nonresidential father involvement 6–8 years following divorce characterized by differing levels of parent involvement and conflict; children of fathers with moderate involvement and low conflict were better adjusted 15–17 years after divorce as compared with the other groups. In the same sample, Elam, Sandler, Wolchik, and Tein (2016) identified four profiles differentiated on fathers' parenting time, conflict, and parent support. Children with fathers in the high conflict group had the poorest concurrent adjustment 2 years after divorce whereas children with fathers who were in the low parenting time and low support group had the poorest adjustment 6 years later. These results reveal that different individual-level patterns of parenting time, parenting quality, and conflict exist following divorce and that these patterns explain differences in children's outcomes.

Despite these advances, these previous person-centered studies are limited in their examination of the postdivorce family environment. Because their samples were drawn in 1992–1993 and consisted of families in which the mother was the primary residential parent and father was the nonresidential parent, the applicability of their findings to families that are currently going through divorce is limited. Further, these studies only investigated father profiles and not profiles of mothers' parenting time, quality, or interparental conflict.

Two studies have used latent profile analysis to examine profiles of mothers' and fathers' coparenting following separation and divorce and considered profile effects on the interparental relationship, child outcomes, or both in more recent samples. Using latent profile analysis Galovan and Schramm (2017) examined relationship quality and conflict resolution following divorce and found four profiles, respectively, representing low to high

levels of relationship quality and conflict resolution which were termed fiery foes, angry associates, cooperative colleagues, and perfect pals. Profiles with greater relationship quality and conflict resolution were related to greater parent agreement, closeness and support, and less conflict. However, no child outcomes were assessed. In a similar study, Lamela, Figueiredo, Bastos, and Feinberg (2016) performed latent profile analysis on divorced individual's coparenting agreement/support, division of labor, undermining behavior, and child exposure to conflict. Three groups were found: high conflict coparenting, undermining coparenting, and cooperative coparenting. Individuals in the high conflict profile had the highest levels of inconsistent parenting and poor family functioning. Children of parents in the cooperative coparenting profile had the lowest internalizing and externalizing problems. These studies are informative in capturing co-occurring patterns of parenting following divorce. However, by collapsing across mothers and fathers it is not possible to discern any unique effects by parent gender. Additionally, both studies were cross sectional which limits the ability to draw causal inferences on outcomes. Further, both studies had a wide range of time since divorce, which prevented a proximal examination of interparental conflict in the period directly following divorce when it is highest, in accounting for developmental child outcomes. Also, given recent shifts in family structure following divorce it is important to consider parenting quality relative to parenting time which was not examined in either study.

The Current Study

The current study examines separate mother and father profiles of parenting time (face-toface and overnights), quality of parenting (e.g., acceptance/rejection, discipline, communication, family routines), and interparental conflict (frequency, intensity), as well as their association with child adjustment problems assessed concurrently, 3 and 10 months later. The study was conducted with a recently collected sample (2015–2016) of divorced and separated mothers and fathers. This study adds knowledge regarding individual patterns of parenting time, interparental conflict, and parenting quality in both mothers and fathers, and longitudinal relations to child outcomes. Further, profiles were assessed within a relatively short period following divorce. Given that interparental conflict is associated with poorer parenting and that parenting time is associated with higher quality of parenting, it was hypothesized that profiles that represent (a) high conflict and poor quality of parenting as well as (b) high parenting time and high quality parenting would be found. Based on past variable- and person-centered research, it was hypothesized that profiles defined by greater interparental conflict and lower quality of parenting would be associated with poorer child adjustment.

Method

Participants

The overall sample consisted of families who enrolled in an effectiveness trial of an evidence-based parenting-after-divorce program, the New Beginnings Program. The sample was derived from four counties in Arizona that participated in the trial. The overall sample consisted of 886 families (502 mothers, 384 fathers). Mothers and fathers in the overall sample were primarily from separate families. In the 61 families in which both parents were

enrolled in the study, one parent was selected at random for inclusion in the current analyses and the other excluded to maintain independence of the families. Participants residing with their spouse were also excluded, resulting in the present subsample (mothers N=472; fathers N=353).

The ethnic composition of the sample was: 65.1%/54.1% NonLatino White, 35.2%/27.3% Latino, 2.5%/3.9% African American, 8.2%/3.7% other race/ethnicity for mothers/fathers, respectively. There was a wide range of educational attainment of mothers/ fathers, respectively: 28.1%/34.4% had a bachelor's degree or higher, 44.6%/39.3% had completed some college or a 2-year associate college or vocational program certificate, 13.9%/16.4% had a high school diploma or GED, and 4.2%/2.9% had less than a high school diploma. Median income for mothers was ~10,000–~20,000 per year and for fathers was ~30,000–~40,000 per year. Of the participants, 84.8% had been legally married and 15.2% had not been legally married. Of those legally married, 37.2% were legally divorced which for 90% of individuals had occurred in the past 2 years. The median time since living together was 15 months for mothers and 17 months for fathers. Children's ages ranged from 3 to 18 (median = 8 years of age) and child gender was evenly divided (52.1% male, 47.9% female).

Procedures

The primary method of recruitment was through a 12-min DVD about the program, which was presented during the 4-hr parent education program that was mandated for all families seeking a divorce or separation with minor children. Parents who expressed an interest were contacted and screened by telephone. Eligibility criteria were: (a) having at least one child between the ages of 3 to 18, (b) parent spends a minimum of three or more hours each week or one or more overnights every other week with the child, (c) ability to complete the assessments and program in English, and (d) not being a referral from either juvenile court or child protective services. Parents who enrolled completed an informed consent. In addition to assessing parents, children ages 9–18 were interviewed when parents gave permission for their participation and children provided assent. Parents were randomly assigned to the experimental conditions from the New Beginnings Program, a 10-session skills-focused parenting program or an active control condition that consisted of a twosession education- and motivation-focused parenting program. Parents and children completed the pretest interview over the phone. Parents and children in both conditions were reinterviewed 3 months and 10 months later. The time frame for all measures was during the past 30 days. The current study and procedures were approved by the research ethics committee at Arizona State University (Study title: Multicourt Evaluation of the New Beginnings Program: Trial; Protocol: 1202007375).

There was an 84% retention rate from the pretest interview to the 10-month follow-up. We conducted sensitivity analyses to determine if there were any differences in parenting or demographic indices for those who participated at the 10-month followup. The only difference that emerged was those individuals who participated in the 10-session condition were more likely to have participated at the 10-month follow-up, F(1, 505) 5.74, p.017.

Measures

Pretest measures in latent profile analysis.

Parenting time.: Mothers and fathers reported on the amount of parenting time they had with their child using two items: "In the last 30 days, how many days did you spend two or more hours with your child when you were both awake?" which assessed face-toface parenting time, and "In the last 30 days, how many nights did your child sleep at your home?" which assessed number of overnights. The past 30-day timeframe was selected to match the timeframe of the measures of parenting quality and conflict. These are commonly used measures of postdivorce parenting time which have been used by multiple studies (see Smyth, 2005).

Interparental conflict.: Mothers and fathers completed the frequency and intensity subscales of the Children's Perception of Interparental Conflict scale (CPIC; Grych, Seid, & Fincham, 1992) which was reworded for parents' report. A total of 15 items (e.g., "In the past month, your children knew that you and your ex argued a lot" and "In the past month, when you and your ex argued, you yelled a lot") were rated on a 3-point Likert scale (1 *true, 2 sort of true, 3 false*). Items were scored and averaged such that higher scores indicated greater interparental conflict. Construct validity of the CPIC is supported by its relation with children's adjustment problems (Sandler et al., 2008). Internal consistency was $\alpha = .90$.

Acceptance/rejection.: Mothers and fathers completed the acceptance (16 items) and rejection (16 items) subscales from the Child Report of Parenting Behavior Inventory (CRPBI; Schaefer, 1965). The items were reworded for parents (see Lutzke, Wolchik, & Braver, 1996; "You saw your child's good points more than his/her faults" and "You were not very patient with your child") and scored on a 5-point Likert scale (1 *almost never*, 5 =*almost always*); ratings were made for the last month. Rejection subscale items were recoded and combined with acceptance items and averaged to form an overall average of high acceptance and low rejection. Construct validity of the CRPBI acceptance/rejection scale is supported by its relation with children's adjustment problems (e.g., Wolchik, Wilcox, Tein, & Sandler, 2000). Internal consistency was $\alpha = .85$.

Consistent discipline.: Mothers and fathers completed the consistent discipline subscale of the CRPBI (Schaefer, 1965). The eight items were reworded for parents (e.g., "You soon forgot a rule you had made" and "You only kept rules when it suited you") and scored on a 5-point scale (1 = almost never, 5 = almost always); ratings were made for the last month. Construct validity of the CRPBI consistent discipline scale is supported by relation with children's adjustment problems (Wolchik et al., 2000). Items were scored and averaged so higher scores represented more consistent discipline. Internal consistency was $\alpha = .83$.

Parent–adolescent communication.: Mothers and fathers completed the Parent–Adolescent Communication Scale (Barnes & Olson, 1982). Ten items (e.g., "You tried to understand your child's point of view" and "You were always a good listener for your child") were rated on a 5-point scale ($1 = disagree \ a \ lot$, $5 = agree \ a \ lot$). Items were averaged so higher scores indicated better communication. Prior evidence demonstrates the measure's validity and reliability (Barnes & Olson, 2003). Internal consistency was $\alpha = .83$.

Family routines.: Mothers and fathers completed an adapted version of the Family Routines Inventory (FRI; Jensen, James, Boyce, & Hartnett, 1983). Parents were asked about seven family routines (e.g., "You spent time regularly with your child" and "You did activities together with your child on a regular basis") and indicated the degree to which routines took place (1 = never, 2 = sometimes, 3 = a lot). Items were averaged so higher scores represented more consistent family routines. Evidence exists for the measure's concurrent validity with children's adjustment problems (Cohen, Taborga, Dawson, & Wolchik, 2000). Internal consistency was $\alpha = .81$.

Child adjustment outcomes and covariates.

Child behavior problems.: Mothers and fathers completed the Child Behavior Checklist if their child/children was age 6 or older (CBCL; Achenbach & Rescorla, 2001) or the preschool Child Behavior Checklist if their child/ren was younger than 6 (preCBCL; Achenbach & Rescorla, 2000). Items were rated on a 3-point Likert scale (1 = not true, 2 = somewhat true, 3 = very true) and summed so higher scores represented more problems. *T* scores were used to render the CBCL and pre-CBCL into equivalent scales (Achenbach, personal communication, May 11, 2015). The internalizing subscales of the CBCL (31 items) and pre-CBCL (36 items) were used to assess parent report of child internalizing problems. Internal consistency for the preschool CBCL and CBCL, respectively, were a = .90 and .89 at pretest, a = .90 and .89 at 3-month follow-up, and a = .91 and .88 at 10-month follow-up. The externalizing subscales of the CBCL (35 items) and pre-CBCL (24 items) were used to assess parent report of child externalizing problems. Internal consistency for child externalizing problems. Internal consistency for subscales of the CBCL (35 items) and pre-CBCL (24 items) were used to assess parent report of child externalizing problems. Internal consistency for child externalizing problems. Internal consistency for here a = .91 and .90 at pretest, a = .92 and .89 at 3-month follow-up, and a = .92 and .89 at 3-month follow-up. A large body of literature supports the validity of the CBCL (e.g., Wolchik et al., 2000).

Covariates.: A number of covariates were included in the latent profile analysis and in analyses of concurrent and prospective associations between parent class and child internalizing and externalizing problems. In the latent profile analyses and concurrent tests between parent class and child internalizing and externalizing problems, child age, child gender, parent ethnicity, and family income including child support were included as covariates. In the prospective association tests, in which child outcomes were assessed after the intervention, intervention condition and the interaction of intervention condition and parent class were also included to control for the possible differential effect of the intervention relative to individual parent profiles.

Analytic Strategy

All analyses were conducted separately for mothers' and fathers' data using Mplus Version 7.0 (Muthen & Muthen, 2012). Full information maximum likelihood (FIML; see Enders, 2010) was used to handle cases with missing data. We used latent profile analysis (LPA) defined across seven indicators: face-to-face parenting time, overnights with child, interparental conflict, acceptance/rejection, consistent discipline, parent–child communication, and family routines (see Table 1). The latent profile analysis uses the set of these observed indicators to probabilistically group individuals into discrete profiles. Child's sex and age and family income were entered as covariates of the latent profiles so resulting

profiles accounted for these variables. Variables were standardized prior to the LPA for ease of presentation. Recent power analysis (Tein, Coxe, & Cham, 2013) has shown that given adequate distance between profiles (Cohen's d = 1.5) a sample size of N = 250 provides adequate power, indicating that the present LPA was well-powered (mothers N = 472, fathers N = 353).

As an initial step, parenting and child outcomes were examined for differences by parent gender. An ANOVA indicated that all measures of parenting (class indicators) were significantly different based on parent gender (Fs > 6.14, ps < .013) except for acceptance/ rejection (F = 1.24, p = .27). A preliminary latent profile model indicated that parent gender was differentially associated with class membership across all pairwise class comparisons (ps < .012). An ANOVA also indicated that all measures of child externalizing and internalizing were significantly different based on parent gender (Fs > 4.38, ps < .037) except for externalizing at the 3-month follow-up (F = 2.66, p = .10). Thus, latent profile analysis was conducted separately for mothers and fathers.

To determine profiles and their association with children's adjustment problems several specification steps were taken. The optimal number of profiles was determined by comparing several models on the basis of model fit and interpretability of the resulting profiles. Mean differences among the observed indicators (face-to-face parenting time, number of overnights, interparental conflict, acceptance/rejection, consistent discipline, parent–child communication, family routines) were tested across profiles using Wald's chi square equality test (Muthen & Muthen, 2012). Finally, mean differences on covariates were tested across profiles with logistic regression.

Once the best-fitting models were determined for mothers, profiles were extracted and multinomial regression in Mplus was used to test for differences across mothers' profiles and children's internalizing and externalizing problems at pretest (concurrent), the 3-month follow up, and the 10-month follow up. Similar procedures were applied to fathers' profiles. These analyses controlled for child's gender, child's age, parent ethnicity, and family income including child support. Prospective child adjustment outcome analyses also controlled for intervention condition and the interaction between intervention condition by parent class.

Results

Means, standard deviations, and correlations were first examined for the study variables (see Table 1). Broadly, mothers had higher mean levels of contact than fathers. Mothers' time with the child was associated with parenting, but this pattern was less apparent in fathers. Both mothers' and fathers' parenting was negatively associated with conflict, respectively, which were negatively and positively associated with child behavior problems, respectively.

Following this, a latent profile analysis was conducted, beginning with a one-profile solution and increasing profiles iteratively until the best possible solution was arrived at. The adjusted Bayesian information criterion (ABIC; Schwarz, 1978) and bootstrap likelihood ratio test (BLRT; McCutcheon, 1987) were examined as indicators of fit (see Tein et al., 2013). Solutions were excluded if a profile size was less than 5% of the overall sample

(Modecki et al., 2015; Tein et al., 2013). For both mothers and fathers, the four-profile solution showed better fit to the data than the three-profile solution (see Table 2). For mothers, the five-profile solution was a poorer fit to the data compared with the four-profile solution and did not converge properly. For fathers, although the five-profile solution had slightly better fit indices than the four-profile solution, the five-profile solution extracted two profiles which were very similar, one of which contained less than 5% of the sample. As such, the four-profile solution was chosen for both mothers (entropy = .93) and fathers (entropy = .93), based both on fit and interpretability of patterns among indicators. Distance between latent class factor scores was adequate to detect differences in both mother and father models (ds > 1.5; Tein et al., 2013).

Profiles were interpreted and named based on the following rules. Parenting time (face-to-face parenting time and overnights), was named based on current recommendations based on percentage of overnights the parent spends with children in which 70%–100% of time is "sole parenting," 30%–69% is "shared parenting," and 29% and below is "infrequent parenting" (Cancian et al., 2014; Smyth et al., 2016). To be differentiated on parenting time we required a profile to be significantly higher or lower than at least two other profiles.

Profiles were interpreted and named based on their relative difference from one another on interparental conflict, and parenting (acceptance/rejection, consistent discipline, parent–child communication, and family routines). For interparental conflict, we required a profile to be significantly higher or lower than at least two other profiles to receive the designation as either "high" or "low" on a particular construct (e.g., high conflict, low conflict), and to not be significantly different in the opposite direction from the third profile. Given that there were four indices of parenting, we required that a profile be higher or lower on three out of the four indices of parenting to receive the designation of "high" or "low" (high parenting, low parenting). Where a profile did not fit these decisions rules (i.e., a profile was not distinguished from another), the corresponding label was omitted from the profile name.

Mother Results

Differences among indicators and covariates across mother profiles.—Figure 1 and Table 3 present the profiles and differences of the indicators for the mother model. Group 1 consisted of 10.8% (n = 51) of the sample and showed significantly fewer days of face-to-face parenting time and overnights (43% face time, 31% overnights) than the other three groups. Mothers in Group 1 were not significantly different on interparental conflict than any other group. Mothers in Group 1 displayed lower acceptance and higher rejection, lower parent–child communication, and lower family routines than Groups 2 and 4, and lower consistent discipline than Group 4. These mothers were labeled low quality–shared parenting.

Group 2 consisted of 25.4% (*n* 120) of the sample and showed relatively less face-to-face parenting time and fewer overnights than Groups 3 and 4 (66% face time, 59% overnights), though they were still significantly higher than Group 1 on both. Mothers in Group 2 had significantly greater interparental conflict compared with Group 4. Compared with Groups 1 and 3, Group 2 showed higher acceptance and lower rejection and higher parent–child

communication and family routines. These mothers were labeled high quality-shared parenting.

Group 3 consisted of 30.1% (n = 142) of the sample and showed comparatively higher levels of face-to-face parenting time and overnights (93% face time, 90% overnights) than Groups 1 or 2. Mothers in Group 3 had significantly greater interparental conflict than Group 4. Compared with Groups 2 and 4, these mothers also displayed relatively lower acceptance and higher rejection, lower consistent discipline, lower parent–child communication, and lower family routines. These mothers were labeled low quality–sole parenting.

Group 4 consisted of 33.7% (n = 159) of the sample. These mothers were comparatively higher in face-to-face parenting time and overnights (96% face time, 95% overnights) compared with Groups 1 and 2. Mothers in Group 4 had lower interparental conflict than Group 2 and 3. They displayed higher acceptance/lower rejection and higher consistent discipline compared with Groups 1 and 3. They had higher parent–child communication and family routines than all other groups. These mothers were labeled high quality–low conflict–sole parenting.

Associations between mother profiles and child behavior problems.

Concurrent associations.: Children with mothers in the low quality–sole parenting group had greater internalizing and externalizing problems than the high quality–shared parenting group and the high quality–low conflict–sole parenting group (see Table 3). Children with mothers in the low quality–shared parenting group had greater internalizing and externalizing problems than those in the high quality–low conflict–sole parenting group and greater externalizing that those in the high quality–shared parenting group.

Prospective associations.: Children with mothers in the low quality–sole parenting group had greater internalizing and externalizing problems than the high quality–low conflict–sole parenting group at the 3-month follow-up (see Table 3). At the 10-month follow-up, similar to the 3-month follow-up, children with mothers in the low quality–sole parenting group had greater internalizing and externalizing problems than the high quality–low conflict–sole parenting group. Children with mothers in the low quality–sole parenting group also had greater externalizing problems than those in high quality–shared parenting group.

Father Results

Differences among indicators and covariates across father profiles.—Figure 2 and Table 4 present the profiles and differences of the indicators for the father model. Group 1 consisted of 24.1% (n = 85) of the sample. These fathers were lower than all other groups in face-to-face parenting time and overnights (32% face time, 12% overnights). Fathers in Group 1 did not differ from the other groups on levels of interparental conflict. Fathers in Group 1 displayed lower acceptance and higher rejection, lower consistent discipline, and parent–child communication than Group 4, and lower levels of family routines than all other groups. These fathers were labeled low quality–infrequent parenting.

Group 2 consisted of 30.6% (n = 108) of the sample. These fathers were higher than Group 1 on face-to-face parenting time and overnights but lower than Groups 3 and 4 (56% face time,

14% overnights). Fathers in Group 2 displayed greater interparental conflict compared with Group 4. Fathers in Group 2 displayed poorer parenting compared with Group 4 on acceptance and rejection, consistent discipline and parent–child communication. However, fathers in Group 2 displayed better acceptance/rejection than Group 3 and family routines than Groups 1 and 3. These fathers were labeled infrequent parenting.

Group 3 comprised 17.6% (n = 62) of the sample. These fathers showed higher face-to-face parenting time and overnights (91% face time, 89% overnights) compared with all groups. Fathers in Group 3 displayed higher levels of interparental conflict than Group 4. Fathers in Group 3 displayed lower levels of parenting on all indices compared with Group 4. Group 3 fathers also displayed lower acceptance and higher rejection and lower family routines compared with Group 2, but greater family routines than Group 1. These fathers were labeled low quality–sole parenting.

Group 4 comprised 27.8% (n = 98) of the sample. These fathers showed higher face-to-face parenting time and overnights (62% face time, 51% overnights) compared with Groups 1 and 2 but lower face-to-face time and overnights as compared with Group 3. Fathers in Group 4 displayed lower interparental conflict compared with both Groups 2 and 3. Fathers in Group 4 displayed the highest levels of parenting compared with all other groups. These fathers were labeled high quality–low conflict–shared parenting.

Associations between father profiles and child behavior problems.

Concurrent associations.: Children with fathers in the high quality–low conflict–shared parenting group had fewer internalizing problems and fewer externalizing problems than the other three groups (see Table 4). Children with fathers in the low quality–sole parenting group had higher externalizing problems than children in the low quality–infrequent parenting group.

Prospective associations.: At the 3-month follow-up, children with fathers in the high quality–low conflict–shared parenting group had fewer internalizing problems and externalizing problems than the low quality–sole parenting group (see Table 4). Children with fathers in the low quality–sole parenting groups had greater externalizing problems compared with the low quality–infrequent parenting and infrequent parenting groups. At the 10-month follow-up, children with fathers in the high quality–low conflict–shared parenting group displayed fewer internalizing and externalizing problems than the low quality–sole parenting group displayed fewer internalizing and externalizing problems than the low quality–sole parenting group.

Discussion

Integrative Results

Broadly, the results are supportive of family systems theory in which children's adjustment is best understood through examination of the family and its subsystems (Cox & Paley, 2003). However, the lack of differences in interparental conflict across profiles precluded firm examination of the spillover hypothesis, that interparental conflict and parenting quality are linked, in predicting children's adjustment (Erel & Burman, 1995). The lack of differences in interparental conflict may be because mothers and fathers voluntarily enrolled

in the present sample as part of a parenting after divorce program so this may have represented less conflicted families. However, the interplay between parenting time and quality was informative. Given that mother and father profiles were determined with respect to relative differences within each parent gender, comparisons across mothers and fathers were not within the scope of this study. However, general similarities emerged in the composition of mother and father profiles, and their association with child adjustment problems. Similar profiles emerged reflecting (a) low parenting time and low parenting quality, (b) low conflict and high parenting quality, and (c) high parenting time and low parenting quality. For both mothers and fathers, the most positive children's outcomes were associated with low conflict and high quality parenting, irrespective of parenting time. Conversely, the most negative outcomes were associated with a combination of high parenting time and low quality parenting. It may be that poor parenting, for both mothers and fathers, is exacerbated by very high levels of parenting time which contributes to concurrent and longitudinal child outcomes. This supports past research that the combination of parenting time and parenting quality is key in child adjustment (Amato & Gilbreth, 1999).

Collectively, the current research supports findings that interparental conflict and positive quality of parenting are inversely linked (Krishnakumar & Buehler, 2000), and that the combination of low conflict and positive parenting is associated with the best child outcomes (Sandler et al., 2008). However, the fact that groups were least distinguished by levels of conflict limits firm conclusions regarding more complicated relationships of parenting time and quality of parenting with child adjustment problems in the presence of high levels of conflict. It is likely that groups differentiated by high levels of conflict would make parenting time less beneficial to child outcomes (Amato & Rezac, 1994; Elam et al., 2016). The findings that sizable subgroups were found for mothers and fathers that were both characterized by high parenting time, the equivalent of primary parental parenting time, and low parenting quality is of concern, particularly because these children had the highest levels of adjustment problems. It may be that high parenting time and low quality parenting occurs more frequently early in the divorce process (as measured in the current study) and decreases over time as the stress of the transition abates. Results and literature pertaining to mothers and fathers are discussed.

Mother Results

Although our hypothesis of a profile of high parenting time and high quality parenting was supported in mothers, the hypothesized profile of high conflict and poor parenting was not found. It is notable that there are roughly equal numbers of mothers with high amounts of parenting time (sole parenting) but high versus low quality of parenting. A high level of parenting time is clearly not coterminous with high quality of mothers' parenting.

The mother results provide consistent support for our hypotheses that profiles in which there was low quality parenting would be associated with poorer child adjustment (Dunn et al., 2005). The importance of mothers' quality of parenting is supported by the finding that children had fewer adjustment problems (both concurrently and prospectively) when their

mothers had high quality parenting compared with those mothers with greater time but lower quality parenting, despite no observable differences on levels of interparental conflict.

The finding that greater maternal parenting time following divorce does not offset poor maternal parenting is consistent with a wealth of past literature (see Sandler et al., 2012 for a review). This is important as mothers only had shared or sole parenting, but not infrequent parenting, indicating that quality of mothers' parenting is a primary influence on children's adjustment outcomes following divorce. In particular, divorce is associated with increased stress and decreased financial and emotional resources, all of which can impact the quality of maternal parenting following divorce (e.g., Hetherington, Cox, & Cox, 1982; Sandler et al., 2012). Maternal parenting following divorce that is harsh and inconsistent is associated with greater child adjustment problems (e.g., Buehler & Gerard, 2002).

Father Results

We hypothesized that profiles would be found representing high conflict and poor quality of parenting, and high parenting time and high quality parenting, neither of which were represented in fathers. A profile was found representing low conflict and high parenting quality and shared parenting time. This profile, which represented 27.8% of the sample is the only one that would be characterized as shared parenting (51% overnights). Conversely, approximately 55% of the father sample had infrequent parenting time. It is notable that despite the Arizona Statute to maximize both parents' parenting time, only about a quarter of the fathers had shared parenting time (Parenting Plans Act, 2013). This may be due to shared custody plans in which the father chooses to spend infrequent amounts of time with his child or selection biases of the current sample.

Consistent with our hypothesis that lower quality parenting would be associated with greater child adjustment problems, children who spent most of the time (sole time) with fathers who had low quality parenting exhibited the highest levels of problems as compared with the other groups concurrently and prospectively. This supports previous research in divorced and nonresidential fathers indicating that the effects of father parenting time on child adjustment are qualified by the quality of the father–child relationship (Amato & Gilbreth, 1999; Sandler et al., 2012).

Limitations and Directions for Future Research

This study had limitations to consider. One potential limitation of this study is that it was conducted in the context of an experimental trial of an intervention. However, the analyses controlled for intervention condition and intervention by profile interaction and we undertook sensitivity analyses. In these analyses, 19 of the 25 significant association effects were replicated in the comparison group supporting the pattern of effects in the whole sample. Also, the negative effect of high parenting time and low parenting quality may be partially due to poor parenting provided by the other parent. Similarly, the relations between shared parenting and low child problems may be partially due to the parenting time in both parents to tease out these effects. In addition, the absence of a high-conflict sample precludes implications for divorce education programs addressing parent conflict. However,

the current results do support the importance of high quality parenting in divorcing families relative to child outcomes, which is an important facet of such programs. Finally, this sample is specific to Arizona, a state with policies that encourage shared parenting time, and therefore the present profiles may look different than in other states.

These findings help to inform current policy issues regarding parenting time following divorce. They highlight the need for comprehensive evaluation of the quality of mothers' and fathers' parenting as well as the levels of conflict in the family when making decisions about parenting time. This study provides evidence that the amount of parenting time the child will have with his or her parent must be considered relative to the quality of parenting that child will receive, as well as the level of conflict between the parents. Primary parenting time with either of the parents is problematic if that parent is not providing high quality parenting. These findings are relatively mute on the benefits of shared parenting in the presence of high levels of interparental conflict. Although both mother and father profiles with sole and shared parenting time, respectively, had some of the fewest child adjustment problems, they also had low levels of conflict, so the differential effect of conflict and quality of parenting could not be disentangled. Despite this, this study illustrates how a person-focused approach advances our understanding of parenting and children's adjustment following divorce.

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References

- Achenbach TM, & Rescorla LA (2000). Manual for the ASEBA Preschool Forms & Profiles. Burlington, NJ: University of Vermont, Research Center for Children, Youth, & Families.
- Achenbach TM, & Rescorla LA (2001). Manual for the ASEBA School-Age Forms & Profiles. Burlington, NJ: University of Vermont, Research Center for Children, Youth, & Families.
- Adamsons K, & Johnson SK (2013). An updated and expanded meta-analysis of nonresident fathering and child well-being. Journal of Family Psychology, 27, 589–599. 10.1037/a0033786 [PubMed: 23978321]
- Amato PR, & Gilbreth JG (1999). Nonresident fathers and children's well-being: A meta-analysis. Journal of Marriage and Family, 61, 557–573. 10.2307/353560
- Amato PR, & Rezac SJ (1994). Contact with nonresident parents, interparental conflict, and children's behavior. Journal of Family Issues, 15, 191–207. 10.1177/0192513X94015002003
- Barnes H, & Olson DH (1982). Parent-adolescent communication scale In Olson DH, McCubbin HI, Barnes H, Larsen A, Muxen M, & Wilson M (Eds.), Family inventories: Inventories used in a National Survey of Family Life Cycle (pp. 438–447). St. Paul: University of Minnesota.
- Barnes H, & Olson DH (2003). Parent-adolescent communication scale. Minneapolis, MN: Life Innovations.
- Baumrind D (1991). The influence of parenting style on adolescent competence and substance use. The Journal of Early Adolescence, 11, 56–95. 10.1177/0272431691111004
- Buehler C, & Gerard JM (2002). Marital conflict, ineffective parenting, and children's and adolescents' maladjustment. Journal of Marriage and Family, 64, 78–92. 10.1111/j.1741-3737.2002.00078.x

- Cancian M, Meyer DR, Brown PR, & Cook ST (2014). Who gets custody now? Dramatic changes in children's living arrangements after divorce. Demography, 51, 1381–1396. 10.1007/s13524-014-0307-8 [PubMed: 24811135]
- Cohen J, Taborga M, Dawson S, & Wolchik SA (6, 2000). Do family routines buffer the effects of negative divorce events on children's symptomatology. Poster presented at the Society for Prevention Research, Montreal, Québec, Canada.
- Coiro MJ, & Emery RE (1998). Do marriage problems affect fathering more than mothering? A quantitative and qualitative review. Clinical Child and Family Psychology Review, 1, 23–40. 10.1023/A:1021896231471 [PubMed: 11324075]
- Cox MJ, & Paley B (2003). Understanding families as systems. Current Directions in Psychological Science, 12, 193–196. 10.1111/1467-8721.01259
- Dunn J, O'Connor TG, & Cheng H (2005). Children's responses to conflict between their different parents: Mothers, stepfathers, nonresident fathers, and nonresident stepmothers. Journal of Clinical Child and Adolescent Psychology, 34, 223–234. 10.1207/s15374424jccp3402_2 [PubMed: 15901223]
- Elam KK, Chassin L, Eisenberg N, & Spinrad TL (2017). Marital stress and children's externalizing behavior as predictors of mothers' and fathers' parenting. Development and Psychopathology, 29, 1305–1318. 10.1017/S0954579416001322 [PubMed: 28065187]
- Elam KK, Sandler I, Wolchik S, & Tein J-Y (2016). Non-residential father-child involvement, interparental conflict and mental health of children following divorce: A person-focused approach. Journal of Youth and Adolescence, 45, 581–593. 10.1007/s10964015-0399-5 [PubMed: 26692236]
- Enders CK (2010). Applied missing data analysis. New York, NY: Guilford Press.
- Erel O, & Burman B (1995). Interrelatedness of marital relations and parent-child relations: A metaanalytic review. Psychological Bulletin, 118, 108–132. 10.1037/0033-2909.118.1.108 [PubMed: 7644602]
- Fabricius WV, & Luecken LJ (2007). Postdivorce living arrangements, parent conflict, and long-term physical health correlates for children of divorce. Journal of Family Psychology, 21, 195–205. 10.1037/0893-3200.21.2.195 [PubMed: 17605542]
- Fabricius WV, Sokol K, Diaz P, & Braver S (2012). Parenting time, parent conflict, parent-child relationships, and children's physical health In Kuehnle K & Drozd L (Eds.), Parenting plan evaluations: Applied research for the family court (pp. 188–213). New York, NY: Oxford University Press.
- Fagan J, Day R, Lamb ME, & Cabrera NJ (2014). Should researchers conceptualize differently the dimensions of parenting for fathers and mothers? Journal of Family Theory & Review, 6, 390–405.
- Galovan AM, & Schramm DG (2017). Initial coparenting patterns and postdivorce parent education programming: A latent class analysis. Journal of Divorce & Remarriage, 58, 212–226. 10.1080/10502556.2017.1303320
- Grych JH, Seid M, & Fincham FD (1992). Assessing marital conflict from the child's perspective: The children's perception of interparental conflict scale. Child Development, 63, 558–572. 10.2307/1131346 [PubMed: 1600822]
- Hetherington EM, Cox M, & Cox R (1982). Effects of divorce on parents and children In Lamb ME (Ed.), Nontraditional families: Parenting and child development (pp. 233–288). Hillsdale, NJ: L. Erlbaum Associates.
- Jensen EW, James SA, Boyce WT, & Hartnett SA (1983). The family routines inventory: Development and validation. Social Science & Medicine, 17, 201–211. 10.1016/02779536(83)90117-X [PubMed: 6844952]
- King V, & Sobolewski JM (2006). Nonresident fathers' contributions to adolescent well-being. Journal of Marriage and Family, 68, 537–557. 10.1111/j.1741-3737.2006.00274.x [PubMed: 18270550]
- Krishnakumar A, & Buehler C (2000). Interparental conflict and parenting behaviors: A meta-analytic review. Family Relations, 49, 25–44. 10.1111/j.1741-3729.2000.00025.x
- Lamela D, Figueiredo B, Bastos A, & Feinberg M (2016). Typologies of post-divorce coparenting and parental well-being, parenting quality and children's psychological adjustment. Child Psychiatry and Human Development, 47, 716–728. 10.1007/s10578-0150604-5 [PubMed: 26518292]

- Lewis C, & Lamb ME (2003). Fathers' influences on children's development: The evidence from twoparent families. European Journal of Psychology of Education, 18, 211–228. 10.1007/BF03173485
- Lutzke J, Wolchik SA, & Braver SL (1996). Does the quality of mother-child relationships moderate the effect of postdivorce interparental conflict on children's adjustment problems? Journal of Divorce & Remarriage, 25, 15–38. 10.1300/J087v25n03_02
- McCutcheon AL (1987). Latent profile analysis. Beverly Hills, CA: Sage.
- McKinney C, & Renk K (2008). Differential parenting between mothers and fathers: Implications for late adolescents. Journal of Family Issues, 29, 806–827. 10.1177/0192513X07311222
- Menning CL (2006). Nonresident fathers' involvement and adolescents' smoking. Journal of Health and Social Behavior, 47, 32–46. 10.1177/002214650604700103 [PubMed: 16583774]
- Modecki KL, Hagan MJ, Sandler I, & Wolchik SA (2015). Latent profiles of nonresidential father engagement six years after divorce predict long-term offspring outcomes. Journal of Clinical Child and Adolescent Psychology, 44, 123–136. 10.1080/15374416.2013.865193 [PubMed: 24484456]
- Muthén L, & Muthén B (2012). Mplus user's guide (version 7.2). Los Angeles, CA: Author.
- Nielsen L (2013). Shared residential custody: Review of the research (Part I of II). American Journal of Family Law, 27, 61–71.
- Parenting Plans Act AZ Rev. Stat. § 25-403.02 (2013).
- Putnick DL, Bornstein MH, Lansford JE, Chang L, Deater-Deckard K, Di Giunta L, ... Bombi AS (2012). Agreement in mother and father acceptance-rejection, warmth, and hostility/rejection/ neglect of children across nine countries. Cross-Cultural Research, 46, 191–223. 10.1177/1069397112440931 [PubMed: 23024576]
- Sandler I, Miles J, Cookston J, & Braver S (2008). Effects of father and mother parenting on children's mental health in high- and low-conflict divorces. Family Court Review, 46, 282–296. 10.1111/ j.1744-1617.2008.00201.x
- Sandler IN, Wheeler LA, & Braver SL (2013). Relations of parenting quality, interparental conflict, and overnights with mental health problems of children in divorcing families with high legal conflict. Journal of Family Psychology, 27, 915–924. 10.1037/a0034449 [PubMed: 24098960]
- Sandler I, Wolchik S, Winslow EB, Mahrer NE, Moran JA, & Weinstock D (2012). Quality of maternal and paternal parenting following separation and divorce In Kuehnle K & Drozd L (Eds.), Parenting plan evaluations: Applied research for the family court (pp. 85–122). New York, NY: Oxford University Press 10.1093/med:psych/9780199754021.003.0004
- Schaefer ES (1965). A configurational analysis of children's reports of parent behavior. Journal of Consulting Psychology, 29, 552–557. 10.1037/h0022702 [PubMed: 5846126]
- Schwarz G (1978). Estimating the dimension of a model. Annals of Statistics, 6, 461–464. 10.1214/aos/1176344136
- Simons LG, & Conger RD (2007). Linking mother–father differences in parenting to a typology of family parenting styles and adolescent outcomes. Journal of Family Issues, 28, 212–241. 10.1177/0192513X06294593
- Smyth BM (2005). Time to rethink time? The experience of time with children after divorce. Family Matters, 71, 4–10.
- Smyth BM, McIntosh JE, Emery RE, & Higgs Howarth SL (2016). Shared-tiem parenting: Evaluating the evidence of risks and benefits to children In Kuehnle K & Drozd L (Eds.), Parenting plan evaluations: Applied research for the family court (2nd ed., pp. 118–169). New York, NY: Oxford University Press 10.1093/med:psych/9780199396580.003.0006
- Tein JY, Coxe S, & Cham H (2013). Statistical power to detect the correct number of classes in latent profile analysis. Structural Equation Modeling, 20, 640–657. 10.1080/10705511.2013.824781 [PubMed: 24489457]
- Wolchik SA, Wilcox KL, Tein J-Y, & Sandler IN (2000). Maternal acceptance and consistency of discipline as buffers of divorce stressors on children's psychological adjustment problems. Journal of Abnormal Child Psychology, 28, 87–102. 10.1023/A:1005178203702 [PubMed: 10772352]





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3. Conflict	03	05		16**	18	16 ^{**}	$10^{*}$	.19**	.14 *	.15*	.13*	.17*	.10
4. Acc/Rej.	11*	$.10^*$	22 ^{***}		.49 ***	.61 ***	.39 ***	36 ***	38	23 **	20 **	25 **	23 **
5. Con. Disc.	02	03	21 ***	.57 ***		.25 ***	.14 **	20 **	28	17*	17*	07	10
6. Comm.	.18***	.19***	14 **	.59***	.20***		.35 ***	39 ***	30 ***	25 ***	17*	28 ***	16*
7. Fam. Routines	.30 ***	.31 ***	11*	.51 ***	.24 ***	.43 ***		17 **	—.12 ⁺	07	06	23 **	23 **
8. Int. Cone.	17 **	13*	.14 *	37 ***	26 ***	28 ***	23 ***		.70***	.70***	.54 ***	.61 ***	.46***
9. Ext. Cone.	06	05	.18**	42	26	28 ***	19 **	.61 ***		.52 ***	<i>—LTT.</i>	.53 ***	.71 ***
10. Int. 3-mo	21 ***	20 **	$.10^+$	31 ***	15 *	29 ***	25 ***	.75 ***	.52		70	<i>—17.</i>	.56***
11. Ext. 3-mo	13 *	13*	.18**	36 ***	21 ***	29 ***	22	.49 ***	.79	.61 ***		.63 ***	.81 ***
12. Int. 10-mo	07	02	03	21 **	21 ***	$11^{+}$	04	.61	.41	.67	.35 ***		.65
13. Ext 10m	05	02	.06	29 ***	28	13*	06	.37 ***	.73 ***	.42 ***	.70 ***	.54 ***	I
Mothers Mean (SD)	24.86 (6.76)	23.61 (7.63)	1.48 (.47)	4.47 (.37)	4.38 (.55)	4.53 (.46)	2.68 (.34)	10.48 (8.01)	10.71 (8.07)	8.83 (7.44)	9.12(7.72)	8.15(7.00)	8.65 (7.76)
Fathers Mean (SD)	17.90 (8.46)	14.52 (9.41)	1.56 (.47)	4.50 (.36)	4.55 (.46)	4.43 (.54)	2.58 (.39)	8.79 (7.36)	9.10(7.85)	7.44 (7.28)	8.45 (8.81)	7.14(6.93)	7.27 (7.83)
<i>Note</i> . In the corrclation narent adolescent comm	1 table, mother: minication [.] Fa	s are below and m Rout = Fan	d fathers are al nilv Routines	bove the diage Int = internation $I_{\rm m}$	onal. Face = 1	face-to-face p = externalizin	arenting lime.	; Acc/Rej. = ac	ceptance and re = 3-month foll	ection: Con. ] w-un. 10-mo	Disc = consiste = 10-month fc	ent discipline;	Comm. =
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Table 2

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mber of latent profiles	AIC	BIC	ABIC	ΓΓ	VLRT	LMR	BLRT	Entropy
Mothers								
1	14704.54	14787.80	14724.33	-7332.27				
2	8040.157	8169.023	8070.635	-3989.078	877.847	869.539 ***	877.847	.92
6	7566.416	7765.951	7613.608	-3735.208	507.741	502.936	507.741	76.
4	7187.953	7458.156	7251.857	- 3528.976	446.464	442.238	446.464	.93
S	8087.74	8432.77	8169.34	-3960.87		ļ		.93
Fathers								
1	11634.62	11712.06	11648.61	-5797.31	I	I		
2	6461.841	6581.702	6483.357	-3199.921	564.357*	558.754*	564.357 ***	06.
ю	6218.535	6404.125	6251.85	-3061.267	277.307*	274.554*	277.307 ***	.92
4	6053.634	6304.954	6098.748	-2961.817	198.901	196.926	*** 198.901	.93
5	5965.003	6282.053	6021.916	-2900.501	131.342	130.038	131.342	.92

3 ayesian Information Criteria; ABIC = Adjusted Bayesian Information Criteria; LL = Log likelihood; VLRT = Vuong-Lo-Mendell-Rubin Likelihood Ratio Test; LMR = Lo-Mendell-Rubin Adjusted Likelihood Ratio Test; BLRT = Bootstrapped Likelihood Ratio Test. Mothers 5-profile model did not terminate normally so VLRT, LMR, and BLRT indices were not available. Note.

 $^{*}_{p < .05.}$ 

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p < .001.

LPA indicator	Group 1 (10.8%): Low quality- shared par.	Group 2 (25.4%): High quality- shared par:	Group 3 (30.1%): Low quality-sole par.	Group 4 (33.7%): High quality-low conflict-sole par.	Wald x ² Diff.
Face Par. Time	12.84 (7.03) ^{abc}	19.83 (4.40) ^{ade}	27.94 (4.50) ^{bd}	28.86 (2.63) ^{ce}	^a 5,29 *, ^b 21.15 ***, ^c 24.52 ***, ^d 139.56 ***, ^e 221.54 ***
Overnights	9.22 (7.16) ^{abc}	17.83 (3.41) ^{ade}	27.14 (4.64) ^{bd}	28.45 (3.06) ^{ce}	^a 18.95 ^{***} , ^b 50.53 ^{***} , ^c 61.67 ^{***} , ^d 137.39 ^{***} , ^c 254.88 ^{***}
IPC	1.48 (.44)	1.50 (.45) ^a	1.60 (.51) ^b	1.35 (.42) ^{ab}	^a 5.02 *, b14.00 ***
Acc/Rej.	4.18 (.47) ^{ab}	4.61 (.21) ^{ac}	4.20 (.33) ^{cd}	4.72 (.19) ^{bd}	$^{a}22.09 \ ^{***}, b23.08 \ ^{***}, c22.33 \ ^{***}, d_{2}06.84 \ ^{***}$
Con. Disc	$4.18(.67)^{a}$	4.55 (.39) ^b	4.05 (.64) ^{bc}	4.61 (.34) ^{ac}	a9.44 *, b7.77 **, c61.85 ***
P-C Comm.	4.16 (.64) ^{ab}	4.64 (.30) ^{acd}	4.29 (.50) ^{ce}	4.80 (.18) ^{bde}	^a 20.45 ***, ^b 23.08 ***, ^c 18.24 ***, ^d 5.83 *, ^c 81.76 ***
Fam. Routines	2.29 (.52) ^{ab}	2.76 (.21) ^{acd}	2.50 (.31) ^{ce}	2.88 (.13) ^{bde}	^a 5.66 *, ^b 7.60 ***, ^c 36.54 ****, ^d 9.98 **, ^e 131.39 ***
Ch. Outcomes					Unstandardized Beta (SE)
Int. Conc.	58.57 (12.05) ^a	55.76 (9.37) ^b	60.39 (10.33) ^{bc}	53.48 (10.27) ^{ac}	$^{a}.20(.08)^{**}$ , b.40 $(.06)^{***}$ , c.62 $(.06)^{***}$
Ext. Conc.	57.74 (10.32) ^{ab}	53.65 (9.59) ^{ac}	(8.42) ^{cd}	52.43 (9.35) ^{bd}	^a .18 (.08) ^{**} , ^b .25 (.08) ^{***} , ^c .27 (.06) ^{***} , ^d .32 (.06) ^{***}
Int. 3-mo	56.72 (11.02)	53.91 (10.02)	$56.55 (11.04)^{a}$	$51.03 (10.27)^{a}$	$^{a}.24$ (.11) **
Ext. 3-mo	55.59 (11.05)	52.29 (9.28)	$55.04 (9.91)^{a}$	(9.22) ^a	a.22 (.11) **
Int. 10-mo	54.87 (9.55)	52.56 (10.05)	55.95 (11.58) ^a	(11.39) ^a	$^{a}.25$ (.10) **
Ext. 10-mo	53.35 (11.25)	51.82 (9.75) ^a	(10.37) ^{ab}	$49.91(10.04)^{b}$	a.24 (.10) **, b.21 (.10) *

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rejection; Con. Disc = consistent discipline; P-C Comm. = parent adolescent communication; Fam. = family; Ch. = child; Int. = internalizing; Ext. = externalizing; Conc. = concurrent; 3-mo = 3-month follow-up; 10-mo = 10-month follow-up; LPA = Latent Profile Analysis.

* *p* <.05.

p < .01.

p < .001.

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Table 3

Comparisons Among Indicators of Mother Groups and Associations With Concurrent and Prospective Child Outcomes

LPA Indicator	Group 1 (24.1%): Low quality-infrequent par.	Group 2 (30.6%): Infrequent par.	Group 3 (17.6%): Low quality-sole par.	Group 4 (27.8%): High quality-low conflict- shared par.	Wald x ² Diff.
Face Par. Time	9.76 (6.88) ^{abc}	16.80 (4.93) ^{ade}	27.44 (4.69) ^{bdf}	18.66 (7.82) ^{cef}	^a 146.30 **** ^b 30.95 ***, c30.58 ***, ^d 294.24 **, ^e 60.96 ***, ^f 67.09
Overnight	3.69 (3.91) ^{abc}	4.36 (3.21) ^{ade}	26.84 (5.63) ^{bdf}	15.42 (8.47) ^{cef}	^a 174.67 *** ^b 99.11 *** c113.21 ** ^d 206.97 *** c107.69 ** f115.53
IPC	1.58 (0.54)	$1.58 (0.43)^{a}$	1.65 (0.47) ^b	1.46 (0.44) ^{ab}	a5.16 * b4.45 *
Acc/Rej.	$4.40(0.36)^{a}$	$4.46(0.26)^{ m bc}$	4.23 (0.46) ^{bd}	4.81 (0.11) ^{acd}	*1 16.21 *** , b43.94 *** c7.17 *** , d97.90
Con. Disc	$4.46(0.51)^{a}$	4.50 (0.42) ^b	4.27 (0.52) ^c	4.86 (0.14) ^{abc}	^a 3.94 * b36.35 *** c35.48
P-C Comm	4.26 (0.55) ^a	4.34 (0.47) ^b	4.22 (0.72) ^c	$4.80~(0.19)^{\rm abc}$	a5.69 * b20.18 *** c32.91
Fam. Routines	2.22 (0.42) ^{abc}	2.62 (0.28) ^{ad}	2.51 (0.41) ^{bde}	2.88 (0.12) ^{ce}	a11.11 *** b13.79 *** c79.24 *** d13.79 *** c37.19
Ch. Outcomes					Unstandardized Beta (SE)
Int. Conc.	$54.70~(10.28)^{a}$	55.80 (10.52) ^b	57.90 (9.79)°	49.21 (10.04) ^{abc}	$^{a}.20$ (.08) ** b.27 (.08) *** c.28 (.08) ***
Ext. Conc.	52.82 (10.11) ^{ab}	53.79 (9.71)°	56.73 (10.91) ^{ad}	48.43 (9.01) ^{bcd}	$^{a}.14$ (.08) $^{*}_{,b}.14$ (.08) $^{***}_{,c}$ $^{c}.23$ (.08) $^{***}_{,d}$ $^{d}.36$ (.08)
Int. 3-mo	53.92(11.56)	52.19 (9.94)	56.14 (11.27) ^a	46.67 (9.67) ^a	^a .32 (.12)
Ext. 3-mo	51.31 (10.20) ^a	52.40 (10.04) ^b	56.98 (12.10) ^{abc}	46.18 (8.04) ^c	^a .27 (.18) [*] , ^b .25 (.12) [*] , ^c .39 (.13) ^{***}
Int. 10-mo	52.88 (11.75)	52.42 (9.39)	55.17 (12.36) ^a	47.66 (9.92) ^a	^a .24 (.08) **
Ext. 10-mo	51.04(11.07)	50.67 (9.45)	52.98 (11.37) ^a	47.30 (8.29) ^a	^a .21 (.25) **

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interparental conflict; Acc/Rej. = acceptance and rejection; Con. Disc = consistent discipline; P-C Comm = parent adolescent communication; Fam. = family; Ch. = child; Int. = internalizing; Ext. = externalizing; Conc. = concurrent; 3-month follow-up; 10-mo = 10-month follow-up.

 $_{p < .05.}^{*}$ 

 $p^{**} p < .01.$ 

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Table 4