Published in final edited form as:
Infant Behav Dev. 2007 February ; 30(1): 63–81.

Is seeing believing? Expectant parents' outlooks on coparenting and later coparenting solidarity

James P. McHale and **Tamir Rotman**
University of South Florida St. Petersburg

Abstract

This study examined short- and longer-term sequelae of parents' prenatal expectations of their future family process, and traced subsequent stability in coparenting solidarity from infancy through the toddler years. 110 couples expecting a first child participated in prenatal assessments of coparenting expectations and differences, and in 3 month post-partum evaluations. 45 couples completed subsequent assessments at 12 and 30 months. At each time point multi-method evaluations of coparental adjustment were obtained. Men's and women's expectancies during the pregnancy and the degree of difference between their self-reported beliefs about parenting predicted post-baby coparental adjustment, with latent class analyses suggesting aftereffects of prenatal expectancies up through 30 months for some couples. Coparental solidarity was also stable from 3 to 12 and from 12 to 30 months. Data indicate that the lens parents bring to bear on their emerging family system is not immaterial, and that early-emerging coparenting dynamics portend longer term coparenting adjustment.

Is seeing believing? Expectant parents' outlooks on coparenting and later coparenting solidarity

In a little over a decade's time, the study of coparenting dynamics within two-parent nuclear family systems has substantiated that support and solidarity between coparenting partners serve centrally important functions in supporting both child and adult adjustment (Feinberg, 2003;McHale, Khazan, Erera, Rotman, DeCourcey & McConnell, 2002). Whether studied in infancy and toddlerhood (Belsky, Crnic & Gable, 1995;McHale, 1995;McHale & Rasmussen, 1998;Schoppe-Sullivan, Mangelsdorf, Frosch & McHale, 2004), the preschool years (Leary & Katz, 2004;McHale, Johnson & Sinclair, 1999;Schoppe, Mangelsdorf & Frosch, 2001), middle childhood (Margolin, Gordis & John, 2001;McConnell & Kerig, 2002;Stright & Neitzel, 2003), or adolescence (Weissman & Cohen, 1985), supportive alliances between coparenting adults bode well for marital adjustment and help promote children's adaptation both in and outside the family (Belsky & Hsieh, 1998;Katz & Low, 2004;McHale, Kuersten & Lauretti, 1996;McHale & Rasmussen, 1998;Schoppe-Sullivan et al., 2004).

Though most of the initial investigations of coparenting dynamics were "snapshot" views of the family system at a single moment in time, this circumstance has recently begun to change. Limited data now exist suggesting at least moderate stability in coparenting and family-level dynamics across developmental time (Gable, Belsky & Crnic, 1995;Fivaz-Depeursinge, Frascarolo & Corboz-Warnery, 1996;VanEgeren, 2003;Schoppe-Sullivan et al., 2004), and work is underway to establish the most meaningful predictors of early coparenting process

(McHale, Kazali, Rotman, Talbot, Carleton & Lieberson, 2004;Van Egeren, 2004;von Klitzing, Simoni, Amsler & Burgin, 1999).

In this report, we seek to build upon this important work in two ways. First, we seek to examine aftereffects of expectant parents' prenatal representations concerning their future family process. Short-term effects of prenatal representations have been documented in prior reports (e.g. McHale, Kazali et al., 2004;von Klitzing et al., 1999), but it is not yet clear whether prenatal representations and expectancies have a longer-term reach. Second, we seek to ascertain the extent to which difficulties detected in early emerging coparental adjustment are sustained over time. Prior investigations indicate that short-term stability in coparental dynamics can be discerned (Gable et al., 1995) with some stability in coparenting behavior apparent even across periods of developmental change (Fivaz-Depeursinge et al., 1996;Schoppe Sullivan et al., 2004). However, no published study has tracked coparental adjustment from the early pre-partum months through the toddler years. We address this gap through study of a small sample of community volunteer families evaluated intensively at 3, 12, and 30 months post-partum.

Relevance of Prenatal Representations

The anticipatory lens that new parents bring to bear as they prepare to co-create new structures in their families of procreation can have an important impact on emergent family dynamics (Fonagy, Steele & Steele, 1991;McHale et al., 2004;von Klitzing et al., 1999). Parents anticipating family problems either in the immediate post-partum or extending into the more distant future may base such negative outlooks on concerns about changes and sacrifices the baby will necessitate in their lives, on concerns about the preparedness of the self as parent or about the coparenting partner based on past experiences in the couple relationship, or on a variety of such worries. But the cast of such negative outlooks may prime new parents to attend differentially and react negatively to the normative struggles of new co-parenthood well documented in the literature (Cowan & Cowan, 1992;Cowan & McHale, 1996;McHale, Kazali et al., 2004). To the extent that this is the case, early post-partum adjustment difficulties may be amplified by negative expectancies and come to be embodied in the family's propensity to work collaboratively as coparenting partners.

Surprisingly few studies have tested this hypothesis directly, though an extensive literature indicates that dramatically unfulfilled expectancies, particularly among women, prompt discontent in the marriage and higher levels of depressive symptomatology in the early post-partum (Belsky, 1985;Ruble, Fleming, Hackel & Stangor, 1988). Couples who become parents do so with certain expectations as to what the baby will be like and how their lives are going to change once the baby arrives (Belsky, 1985;Cowan & Cowan, 1992;Deutsch, Ruble, Fleming, Brooks-Gunn, & Stagnor, 1988;Hackel & Ruble, 1992), though both women and men routinely anticipate more father involvement in caregiving than ultimately materializes (Ruble et al., 1988;Belsky, 1985).

Aside from studies of violated expectancies, however, explicitly negative expectancies per se have rarely been studied in the pre-partum. Delmore-Ko et al's (2000) work is an exception; assessing parents' expectations regarding the impact that the baby would have on various aspects of their lives, these researchers categorized parents as being prepared, fearful, or complacent with respect to parenthood based on the content of the parents' responses. Overall, only 27% of parents were considered prepared for parenthood, while 35% were fearful, and 38% complacent. A significant proportion of women worried about their ability to function effectively as mothers, to handle and to take care of the infant. Women classified as prepared for parenthood reported lower levels of stress and higher levels of self-esteem than either fearful or complacent women. The authors concluded that realistic expectations help mothers contend with their life stresses more effectively and feel more efficacious with respect to child-rearing.

The hypothesis that prenatal expectancies about coparenting solidarity may help promulgate early coparental adjustment has been explored somewhat more directly in just two prior studies. Von Klitzing and colleagues' (1999) pioneering study of prenatal representations of the family established that parents' triadic capacity – their ability to fully incorporate the partner in their prenatal representations about the future family – significantly predicted coordination and collaboration between family members four months after the baby's arrival. More recently, McHale and colleagues (2004) established that more pessimistic outlooks by parents during the third trimester of the pregnancy foreshadowed lower levels of cooperation and warmth between parents during triadic interactions at three months post-partum.

The extent of the reach of prenatal expectations about coparenting and future family process is not yet known. Such representations might be expected to have their greatest impact in the early post-partum, as couples struggle to help both the baby and themselves establish rhythms and handle episodic frustrations, miscommunications, and child-related disputes. However, to the extent that parental belief systems about the family come to organize deeper family structures (McHale & Fivaz-Depeursinge, 1999;McHale, Kazali et al., 2004), they may predict coparenting solidarity well beyond the early pre-partum. Such long-term aftereffects have previously been documented for prenatal marital adjustment (Diamond, Heinicke & Mintz, 1996;Lewis, Owen & Cox, 1988;Lindahl, Clements & Markman, 1997), the most widely studied and documented predictor of coparental and family process (e.g., Belsky et al., 1995;Frosch et al., 1998;Katz & Low, 2004;McHale, 1995;McHale et al., 2004;Schoppe-Sullivan et al., 2004).

Stability through Periods of Developmental Change

Do early emerging family adjustments harken later successes or difficulties, or is the early parenthood transition period so universally tumultuous that patterns established early on are not prognostic of later adjustment? Answers to this question are likely to vary depending on whether the question is asked about the stability of particular coparenting beliefs and dynamics, or about the extent to which there is coherence in coparental solidarity through time (for a thoughtful discussion of this issue, see Sroufe & Waters, 1977;Sroufe, 1979). In the former case, indicators of adjustment or of distress may vary across developmental time. For example, in early infancy, most important might be parents' ability to stay positively connected as partners during the period of incorporating a new family member into the fold. During the terrible twos and again during early adolescence, parents' ability to work collaboratively to establish and enforce developmentally appropriate limits may be a more critical signifier. Hence, while specific family themes may not remain stable over time, age-sensitive indicators of the underlying construct of coparental solidarity should evince coherence through time.

To date, rather little is known about the coherence of coparental solidarity across time, though what little is known does suggest that such coherence exists. McHale and Rasmussen (1998) found that in families showing more signs of coparenting difficulty during triadic family interactions at the end of the child's first year, fathers subsequently reported engaging less often in behavior promoting family integrity, while mothers reported more disparagement of fathers to the children three years later. Schoppe-Sullivan and colleagues (2004) also reported moderate stability across a similar developmental period, linking supportive and undermining coparenting behavior observed during a 5-minute play assessment at 6 months with like behavior during a 10-minute play assessment at 3 years. And Fivaz-Depeursinge et al. (1996), though not focusing explicitly on coparenting per se, nonetheless traced significant continuity in different family alliance types from infancy through the toddler years. Drawing on micro-analytic data concerning co-parents bodily formations during triadic interaction, Fivaz-Depeursinge and her colleagues demonstrated significant stability in overall alliance type from 4 to 18 months of age.

Given the cross-time stability shown in the handful of studies that have used single method evaluations of coparental quality, there is good reason to anticipate that an index of coparental solidarity based upon a more comprehensive, multi-method assessment would be particularly likely to detect cross-time coherence.

Measurement Issues

As we have discussed in greater detail elsewhere (e.g., McHale et al., 2002;McHale, Kuersten-Hogan & Rao, 2004), the first decade of coparenting research was dominated by research using either brief self-report measures of coparental adjustment (e.g., Abidin & Brunner, 1995;Frank, Olmstead & Wagner, 1991;Margolin et al., 2001;McHale, 1997) and/or brief, and sometimes very brief, observations of non-stressful, triadic play interactions (e.g., McHale, 1995;Stright & Neitzel, 2003;Van Egeren, 2004;Schoppe-Sullivan et al., 2004). Given the improbability of any one index, particularly when it is a brief assessment, capturing adequately the core dynamics of any given individual or family phenomenon (Block, 1971), it is quite remarkable that the proxies used to date in coparenting research have consistently documented the strong relationships that they have.

Increasingly, studies of family dynamics have begun making use of the kinds of multi-method assessments of important within-family processes that led to advances in marital research (Gottman & Notarius, 2002), with good results (e.g., Davies, Cummings & Winter, 2004;Forgatch & DeGarmo, 1999;Hayden, Schiller et al., 1998;Katz & Low, 2004;Sturge-Apple, Davies, Boker & Cummings, 2004). While there are both benefits and drawbacks to using composite indicators of family functioning, composite indicators capitalizing on shared variance can be of significant value in basic theory testing (Block, 1971;Cromwell & Peterson, 1983). While there can be value as well in decomposing composite measures into their constituents, large scale investigations employing both sufficiently sensitive constituting measures and samples assuring an adequate range of variability on these measures are required to draw conclusions with confidence. Such investigations, especially when prospective in nature, can be especially challenging to conduct when time-consuming observational and narrative indicators are included, as they should be, among the proxies used to estimate underlying family constructs.

Infant contributions to the family system

In 2003, McHale, Berkman and their colleagues drew attention to a directional bias in coparenting studies to date, which have focused almost exclusively on the effects that coparenting processes appear to have in shaping children's development. Absent from most studies to date has been parallel focus on ways in which infant and child characteristics might themselves shape family trajectories. In one of the few studies of this topic to date, McHale, Kazali et al. (2004) documented that the presence or absence of negative reactivity among young infants can affect cross-time patterns between prenatal risk and post-partum coparenting process. One challenge in establishing the nature of infant effects on coparenting is that different families may incorporate child characteristics in different ways. For example, challenging infant behavior may draw some families together, create a riff in others, and pale in comparison to more significant parent factors in still other families. Systematic assessments of infant temperament in studies of coparenting, and analyses sensitive to differential roles that temperament may play for different family systems, remain in short supply and are needed to further advance our understanding of infant-family dynamics.

Summary and Prospectus

In summary, past research on the transition to new parenthood has examined the importance of parents' representational systems in predicting subsequent parent and marital adjustment, and subsequent parent-child outcomes. Far less is known about the representational predictors

of later coparenting process and adjustment. Data that do exist suggest that expectations of coparenting and family difficulty may in fact set a stage for later coparenting difficulties, and that infant characteristics appear to factor into this equation. Further, aside from the work of Schoppe Sullivan and her colleagues (2004), there has been a dearth of research on cross-time coherence in coparental adjustment emanating from the early post-partum months forward. In this report, we address these significant gaps in the literature by addressing three primary issues:

1. To what extent do prenatal indicators of potential coparenting concern foreshadow later coparenting difficulties at 3, 12, and 30 months post-partum?
2. Is it possible to identify different classes of families for whom prenatal expectancies play an especially important role? Can such families be distinguished on the basis of infant temperament?
3. To what degree can coherence in coparenting adjustment be discerned from early infancy through the toddler years?

Method

Participants

Participants were 110 families, residents of an urban Northeastern community of 180,000, who were recruited from prenatal child-birth classes offered by area hospitals. All parents were expecting a first child. Mean age of women at the time of the prenatal assessment was 31.7 (SD = 5.1, range = 22–47 years). Mean age of men was 33.3 (SD = 6.0, range = 21–49 years). Among the participants, 87 percent of the women were Caucasian and 13% were of African, Hispanic or Asian descent, or of mixed race. 89% of men were Caucasian and the remainder of African, Hispanic or Asian descent, or of mixed race. Median family income in 2002 US dollars fell in the 70,000–75,000 range, with a sample range from 30,000–35,000 to over 100,000.

Participant couples self-referred following recruiting visits to their childbirth classes. To be eligible for the study, couples had to be married or living together in a committed partnership. All couples who volunteered were registered for the study, and hence the sample was not pre-selected on the basis of clinical distress. However, commensurate with other studies of the transition to new parenthood, the sample nonetheless contained a substantial number of families in which one or both parents reported experiencing clinically relevant levels of distress at the time of the prenatal and 3 month assessments. Specifically, in 47 of the 110 couples (45%), one or both parents reported clinically meaningful levels of distress on the Center for Epidemiological Studies Depression Scale (Radloff, 1977) or the Locke Wallace Marital Adjustment test (Locke & Wallace, 1959) during at least one of the study's time points.

Procedure

All 110 couples took part in prenatal assessments at a university-based Family Study Center. During these visits, they were interviewed about their past and future families and completed surveys relevant to future coparenting. At three months post-partum, a visiting team completed assessments in family homes. These evaluations included observations of coparenting behavior during triadic family process and discussions of coparenting issues. At 12 and 30 months post-partum, 45 of the original 110 participant families who had contracted with our research project at the outset to complete evaluations at all four time point assessments returned once again to the Family Study Center for further multi-method assessments of coparenting adjustment. Only two families who initially agreed to multi-year participation at the outset were unable to continue at 12 and 30 months. The proportion of families among the 45 seen at all four assessment periods reporting clinically significant distress on the CES-D or Locke Wallace was essentially identical to that in the full sample (44%). Further analyses comparing the group

of two time point participants and the group of four time point participants revealed no significant differences on any of the important demographic or family process indicators of relevance to this study.

Constructs and Measures

In this section, we outline the various indicators obtained at the different time points of our study. All are listed in Table 1, together with descriptive statistics for each measure. As there were a great many assessments completed and ratings made, we underscore that project coders who worked with videotaped and audiotaped data (licensed clinicians and early career research associates who had trained in scientist-practitioner Ph.D. programs, and post-baccalaureate, graduate and post-doctoral students in clinical psychology) received extensive training, regular oversight by senior scientists, and periodic checkpoint assessments to minimize drift over time. Coding teams always worked independently and blind to all data gathered at other time-points.

Coparenting Concerns Expressed during the Prenatal Period

During the prenatal assessment, three indicators of coparenting concerns were sought. First, participants completed one-on-one interviews (see McHale, Kazali, et al., 2004, for full interview questions) during which they both described the nature of coparenting in their origin families, and outlined their anticipations of both strengths and areas of concern with respect to coparenting in their future family. Interviews were subsequently rated on dimensions capturing both positive and negative (pessimistic) future family outlooks. Participants also completed surveys on which they portrayed perceived similarities and differences in their own and their partners' parenting beliefs, and described the size of the gap they saw between the anticipated division of child-care labor after the baby's arrival, and what for them would be the ideal division of child-care labor. Each of these indices is outlined briefly next:

Pessimistic future family outlook—Coders rated the "future family" portion of the prenatal Coparenting Interview for both positive and negative content. The Negative Outlook score, rated on a scale from 1 (none; absent) to 7 (extensive, a theme of the interview), is the one most pertinent to the construct of prenatal coparenting concerns. High negative outlook scores went to parents who described content clearly colored by negative expectations such as "I'm concerned he won't be there for us" or "I'm worried she will encourage our child to deceive me." Mid-range scores were assigned to parents who expressed concerns ("I don't know what to expect and I'm worried about making mistakes, like when she cries"; "I don't think he's going to want to help change diapers"), without the same dire cast apparent in narratives receiving the highest ratings. Low scores reflected an absence of concerns and negative content. Inter-rater reliability for this measure, calculated on 20% of cases scored was acceptable (intraclass correlation of .76).

Expectations of inequity in the future division of child-care labor—Men and women each completed a prenatal version of Cowan and Cowan's (1988) "Who Does What" questionnaire. They signified who they anticipated would shoulder each of 20 child-care related responsibilities (such as responding to distress, diapering, and so forth). The rating scale ranged from 1 (she does it all) through 9 (he does it all). Scale point 5 was "we do this about equally". Parents were also asked to indicate on each item how ideally they would like responsibility to be divided. Discrepancy scores between the anticipated and ideal ratings were calculated for each item and summed. Larger scores hence indicated a more salient discrepancy between the expected and the ideal.

Perceived differences in parenting belief systems—Parents also reported, both during the pregnancy and at other time points, their own beliefs and their perception of their partner's beliefs about parenting on Cowan and Cowan's Ideas about Parenting (IAP) scale. Using a

scale of 1 (strongly disagree) to 9 (strongly agree) they rated 46 different statements about parenting about child rearing practices, confidence or uncertainty about child rearing, and so forth. Two sets of scores can be derived from this instrument. The first is an individual measure, the discrepancy between the respondent's own set of beliefs and what they perceive their partner's belief set to be. Per-item difference scores can be summed and/or averaged (Table 1) to form a single discrepancy index. Higher scores indicate that the respondent perceives a bigger gap between their own beliefs or ideologies and those of their future coparenting partner.

A second discrepancy index that can be calculated from these data is the actual (mathematical) difference between the two partners' reports. This index proved to be a significant predictor of post-partum indicators of coparental solidarity in several different analyses. This between-parent Ideas About Parenting "actual discrepancy" index was not, however, combined with the other "individual" indices detailed in this section.

Analyses of the inter-relationship among the three different representational indicators of prenatal coparenting concerns revealed a clear and consistent pattern for mothers, but not for fathers. Specifically, mothers expressing greater pessimism about future coparenting solidarity in the prenatal coparenting interview (i.e. women with higher Negative Outlook scores) were also significantly more likely to perceive a larger discrepancy in their own and their partners' ideas about parenting ($r = .33$, $p < .01$) and to portray a larger discrepancy between expected and ideal division of child-care labor ($r = .45$, $p < .01$). By contrast, among men there were no significant associations between negative future family outlook and the other two indicators, indicating that men did not seem to be basing future family concerns on worries about perceived differences in parenting ideologies or on anticipated division of labor inequities.

In order to maintain an acceptable subjects-to-measures ratio for subsequent analyses, we created a single maternal pessimism index by combining the three maternal indicators, standardizing and compositing (summing) the three prenatal scores. The internal consistency of this composite pessimism index was excellent (alpha = .84). For men, we elected to use only the single future family outlook measure. This was because neither men's perceived discrepancy scores on the Ideas About Parenting instrument nor their expected/ideal difference scores on the Who Does What survey correlated with any other concurrent or future coparenting index. Hence, they were not used in later analyses.

Positive and Negative Temperamental Features at 3 months

Given our interest in establishing whether infant temperament played distinctively different roles in families with different cross-time trajectories, we assessed 3-month-olds' early reactivity (both positive and negative) using Rothbart's Infant Behavior Questionnaire (IBQ, 1981). On the IBQ, mothers described the frequency and intensity of various infant reactions to routine events (bathing, feeding, and so forth) over the past 1–2 weeks. A number of these items describe negative reactions (squirming, crying), and are used to form scales describing distress to limitations and fear responses. Rothbart (1986) reported that the distress to limitations and fear scales can be used to approximate an index of negative reactivity that is stable from three to six months ($r = .51$), and that shows good external validity; indeed, Seifer at al. (1996), using an extensive set of naturalistic home observational measures, documented significant linkages between observed infant negativity at home and the IBQ distress to limitations scale.

Following Rothbart (1986), we estimated negative reactivity in the current study using a composite consisting of the distress to limitations and fear scales, and positive reactivity by using duration of orienting, smiling and laughter, and soothability scales. Factor analyses verified that these scales loaded on independent factors. Factor loadings for the negative

reactivity factor were .86 (distress) and .75 (fear), and for positive reactivity .85 (soothability), 70 (duration of orienting) and .56 (smiling and laughter).

Coparenting Cohesion and Conflict following the Baby's Arrival

Also at 3 months, and then again at each of the two subsequent assessment time points, we estimated both coparental Cohesion and coparental Conflict. We did so by using a multi-method approach relying upon developmentally-relevant paradigms and indicators at each time period. Observational indicators of warmth and coparental cooperation, and of competitiveness and verbal sparring during family interactions, were relied upon at each time point, along with other self-report and/or narrative-based indicators of coparental Cohesion and Conflict. Indicators employed at each of the assessment phases are described next, with descriptive data provided in Table 1.

3 month Coparenting Cohesion—Two interaction paradigms were used to assess coparenting behavior during triadic interactions at three months. The Lausanne Trilogue Play (LTP; Fivaz-Depeursinge & Corboz-Warnery, 1999) has families interact in four distinct parts. In Part 1, one parent plays with the baby while the second is just present. In Part 2, the parents switch roles. In Part 3, all three family members play together and in Part 4, the adults interact while the baby is placed in the position of "Third Party".

The other assessment adapted Tronick and Gianino's (1986) Still Face procedure. Both parents played with the baby for two minutes, simultaneously posed motionless faces for two minutes without responding to the baby's bids, and then worked together to soothe the child and reestablish equilibrium. Both the LTP and Still face procedures were evaluated using McHale, Kuersten-Hogan and Lauretti's (2000) Coparenting and Family Rating System (CFRS), modified to accommodate nuances of parental behavior evinced at this early point in development and in the paradigms used (for details, see McHale, Kavanaugh, et al., 2007). Satisfactory inter-rater reliability was attained for all central coparenting process ratings, both at 3 months and at subsequent time points. Specifically, intra-class correlations (calculated for 20% of total cases rated) for the central CFRS rating scales (Cooperation, Competition, Verbal Sparring, Child-Centeredness, and Couple Warmth) across various time points ranged from .66 to .89. At 3 months, warmth and cooperation during the LTP and Still Face assessments were rated on scales from 1 (low) – 5 (high), with ratings then standardized and summed to form global LTP and Still Face Harmony scores. Internal consistencies of these indices were strong (alphas of .87 and .86 for the LTP and Still Face composites, respectively).

A final paradigm used to assess cooperative coparental relations at 3 months was a discussion of perceived differences concerning the division of childcare labor (see Frosch et al., 1998; 2000). Parents tended the baby while negotiating their differences on Cowan and Cowan's (1988) "Who Does What" questionnaire. Parents first independently completed the survey, and then with their own completed surveys in hand shared their responses with one another. They worked together as long as needed to try to achieve consensus on each item, recording each consensus score on a third blank survey form.

Videotapes of these interactions were rated on several dimensions using a scale from 0 (low) to 3 (high; Elliston, Alvarez & McHale, 2005). Inter-rater reliabilities for the post-natal Who Does What discussion, calculated for 33% of cases rated, were within acceptable bounds (intraclass correlations ranging from .68 to .85). Ratings pertinent to the coparenting Cohesion construct included overall positive tone, capacity to reach consensus, and overall collaboration during the process. Scores were standardized and composited (added together) to create a summary 3-month coparenting Cohesion index. This index possessed satisfactory internal consistency (alpha = .73).

3 month Coparenting Conflict—The LTP, Still Face, and Who Does What assessments were also evaluated for evidence of coparental conflict. The first two procedures were evaluated on dimensions of competition and verbal sparring, using modified ratings adapted from pertinent Coparenting and Family Rating System (CFRS) scales. For the Who Does What, scales used to assess conflict included overall negative tone and each partner's defensiveness. As before, items within each of the three assessments were standardized and composited to form single coparenting Conflict scores. Internal consistency for this index was likewise acceptable (alpha = .71).

12 month Coparenting Cohesion—At 12 months, the original Coparenting and Family Rating System (CFRS; McHale et al., 2000) was used to evaluate coparenting interactions during a 20-minute play and teaching interaction (block stacking, plastic bead stringing, puzzle completing, floor play), followed by a clean-up period. Besides coparental warmth, raters also assessed the extent to which parents demonstrated open endorsement or validation of one another's parenting interventions during the interaction, and the extent to which the session was child-centered, as opposed to parent-driven.

To augment these observationally based indicators, we used relevant subscales from McHale's (1997) self-report Coparenting Scale to gauge parents' perceptions of their own coparenting behavior. All subscales used demonstrate adequate internal consistency (McHale, 1997) and concurrent validity (McHale, Kuersten-Hogan, Lauretti & Rasmussen, 2000). To index coparental cohesion, we used the Family Harmony-promoting behavior subscale. Items constituting this subscale pertain to the frequency with which parents show affection to, are inclusive of, and speak affirmatively about their parenting partner during interactions that involve the child.

Finally, parents were interviewed separately about their work as a coparenting team, and their family's best and worst moments. Interviews were transcribed and evaluated using the NAS-TBW (Narrative Assessment Scale of Typical, Best, and Worst Times; Waterston, Babigian & McHale, 2002) on several 1–4 scales, including overall positive and negative tone of the narrative. The Positive Tone score, indexing ability to readily recall positive coparenting and family moments and animation and positive affect in describing such times, served as an index of cohesion. Inter-rater reliability for this scale was acceptable (intraclass correlation, .74).

Summary variables for each indicator outlined above were standardized and summed to form a single index for 12 month coparenting Cohesion (alpha = .77).

12 month Coparenting Conflict—From the family interaction sessions, raters used the CFRS to code competition, amount of verbal sparring, quality of verbal sparring, and each parent's warmth and investment towards the child. The two latter indices were used to calculate a discrepancy score between the parents' warmth and investment.

From the Coparenting Scale, two subscales were used. The Conflict scale indexed arguments about the child, and the Disparagement scale captured undermining of the partners' disciplinary efforts, and denigrating remarks made to the child about the co-parent in that parent's absence. From the coparenting interviews, overall Negative Tone in each partner's narrative was the relevant indicator. Inter-rater reliability (intraclass correlation) for this scale was .79. Finally, the average (per-item) between-partner difference score on the 12-month Ideas About Parenting Scale was used in the composite 12 month Conflict index. This index had acceptable internal consistency (alpha = .72).

30 month Coparenting Cohesion—The same observational (coparental warmth, coparental cooperation, coparental endorsement, and child-centeredness) and self-report

(maternal and paternal Family Harmony scores on the Coparenting Scale) indicators employed at 12 months were again used to estimate 30 month Cohesion (alpha = .69). The 20-minute family play session at 30 months paralleled the 12 month session, but with more developmentally appropriate activities (a competitive game, pretend picnic, game of horseshoes, and exploration of a toy box filled with novel toys, followed by cleanup).

30 month Coparenting Conflict—The same sets of observational (coparental competition, amount of verbal sparring, quality of verbal sparring, warmth discrepancy, investment discrepancy) and self-report indicators employed at 12 months were again used at 30 months to assess coparenting conflict. Because an updated version of the self-reported Coparenting Scale was administered at 30 months, a revised Conflict score (including original and rewritten items from the 1997 Conflict and Disparagement subscales; alpha = .86) was used for the 30-month composite. The final indicator for the Conflict index was the average (per-item) between-parent difference on Ideas about Parenting. Internal consistency of the 30-month coparenting Conflict composite was .77.

As a final step in data reduction, overall Coparental Solidarity scores were calculated at 3, 12, and 30 months by first normalizing the Cohesion and Conflict composite scores, and then subtracting the Conflict score from the Cohesion score. Hence, high Solidarity families were those for whom the battery of measures at that time point indicated that the coparenting partners were high in cohesion and low in conflict. Midrange scores characterized families for whom evidence of either low cohesion or of high conflict were counterbalanced by more favorable scores on the other index. Low scores described families that were both low on cohesion and high on conflict.

Results

The results section is presented in two segments. In the first, we examine 3, 12, and 30-month coparenting outcomes for families where parents had manifested higher prenatal risk (more elevated scores on variables reflecting coparenting concerns and pessimism, negative outlooks, or discrepant parenting ideologies). We do so first using regression analyses, and then with latent class modeling to describe different classes or subgroups of families at each of the three time points whose coparenting outcomes were forecast differently by prenatal data. These class analyses also examine the extent to which classes were sensitive to early temperamental characteristics of the baby. In the second part of the results, we document overall coherence in coparental solidarity across time.

Post-natal sequalae of men's and women's prenatal outlooks on coparenting[1]

Women's pessimism during the third trimester—Were women who revealed greater anticipatory pessimism about coparenting during the pregnancy at greater risk for becoming partners in family systems that did later show signs of coparenting difficulties? Our data indicated that they were. Women's prenatal pessimism foreshadowed poorer coparenting adjustment at both 3 and 12 months. Specifically, greater pessimism during pregnancy predicted lower levels of coparenting Cohesion ($r = -.42$, $p < .05$), but not higher levels of Conflict ($r = -.06$, ns) three months after the baby's arrival. The link between prenatal pessimism and overall Coparental Solidarity fell just short of statistical significance at 3 months

[1]Analyses in these sections examine each parent's prenatal views independently. Preliminary analysis examining whether presence of negative outlooks by both parents incrementally increased predictive power fell short of statistical significance. Based on a median split of maternal and paternal pessimism scores, we categorized families as either both parents expressing high prenatal pessimism, one parent (but not the other) expressing prenatal pessimism, or neither parent doing so. In families where both partners had expressed high pessimism, there was a trend approaching significance for the coparental partnership at 12 months post-partum to show lower solidarity than in families where just one or neither parent had been pessimistic ($p = .07$). This cross-time pattern obtained only for 12, not 3 or 30 month coparenting analyses.

post-partum (r = −.28, p < .10), but was significant at 12 months post-partum (r = −.42, p < .05). By 12 months, this link appeared to be driven more by a cross-time association with higher coparental Conflict (r = .52, p < .01) and less by a cross-time link with lower Cohesion (r = −.16, ns).

By 30 months, the overall associations between prenatal pessimism and family process had diminished, with statistically significant associations no longer in evidence for overall Solidarity (r = −.14, ns), Cohesion (r = −.20, ns) or Conflict (r = .02, ns).

Men's negative outlook during the third trimester—The aftereffects of men's prenatal "future family" outlooks mirrored, in large part, those for women's pessimism. Men who held more negative future family outlooks during the pregnancy later belonged to coparenting alliances that showed poorer adjustment at both 3 and 12 months. At three months men's negative outlooks during the pregnancy predicted significantly less overall Solidarity (r = −.37, p < .05) and Cohesion (r = −.52, p < .01), though not significantly more Conflict (r = −.05, ns). At 12 months, men's negative outlooks during the pregnancy continued to predict low Coparental Solidarity (r = −.36, p < .05), with the cross-time link now significant for high Conflict (r = .47, p < .01), but not low Cohesion (r = −.14, ns). By 30 months, the overall correlation between men's prenatal outlooks and post-partum coparenting Solidarity had dampened (r = −.32, p < .10), though important cross-time associations were identified in the latent class analyses (see below).

Discrepant ideas about parenting during the third trimester—Echoing these findings concerning personally-held outlooks of expectant parents was a parallel cross-time link tying the between-parent IAP discrepancy score to later coparental adjustment. Larger discrepancies between his and her parenting beliefs during the pregnancy predicted less overall Coparental Solidarity at both 3 (r = −.43, p < .05) and 12 months (r = −.45, p < .05). Although the link with overall Solidarity appeared to have weakened by 30 months (r = −.14, ns), latent class modeling (combining IAP discrepancy and prenatal pessimism scores in a single model to better account for different sources of variance; Magidson & Vermunt, 2004) suggested that this appearance was deceptive. These analyses, detailed next, revealed small but significant linkages between greater prenatal IAP discrepancy scores and lower 30 month solidarity across all family classes.

Predictive Power of Prenatal Indicators for Different Classes of Families

Findings reported in these initial sections described the group taken as a whole. Given the probability that there would be distinctive cross-time associative patterns among different subgroups of families in the study, we examined further the predictive power of the prenatal indices using a latent class modeling approach (Vermunt, 1997) to predict global Coparental Solidarity at each time point. The purpose of these analyses was to establish whether there were different patterns of continuity among subgroups of study families. A latent class regression approach was chosen because latent class models outperform more traditional approaches, and are specifically useful and appropriate when the number of classes is finite but unknown. More specifically, such approaches allow for segmentation and hence better representation of predicting trends in subgroups of the population (Wedel & DeSarbo, 1994).

Results from these analyses confirmed that the prenatal representational indices did indeed predict later coparental processes well in some families, but not well in others. Our aim in this paper will be to outline these cross-time relationship patterns. Identifying the types of family processes in which these cross-time relationships occurred is beyond the scope of this report. However, to foster a beginning understanding of the different classes that emerged, we examine infant temperament as a covariate after identifying the ideal models (with respect to number

of classes, or family subgroups) for each time point. The notion that babies' early temperament may alter the trajectory of family processes, consistent with the thrust of this special edition, had been established in prior work from our project linking prenatal pessimism to 3-month family process (McHale et al., 2004).

Following Megidson and Vermunt (2004), we drew on several methods to determine the optimal number of family classes, a strategy mandated by the relatively small number of cases at 12 and 30 months. One parameter, BIC, weighs both model fit and parsimony and is most widely used in comparing models (Megidson and Vermunt, 2004), allowing a straightforward comparison preferring the model with the lowest BIC value. A second method compares models by assessing the unexplained variance (L^2) associated with models with more than one class with that of a one-class, baseline model to determine percent reduction in unexplained variance. Relying on a bootstrap approach, the analysis permits determination of whether the model with more classes should be rejected compared to the more parsimonious model (Langeheine et al., 1996). Overall, the model with the lowest p value greater than .05 represents the best fit for the data.

Since the analyses for this report were conducted for each post partum time point, we strove to establish the same number of classes for all time points, unless the reduction of BIC and relative unexplained variance suggested otherwise. Wald statistics, analyzing variance across groups, were used to establish p values for (a) significance of the effect of the prenatal predictor trio on the different classes, and (b) significance of the difference between classes (the significance of the effect on each class separately is also reported below). We also document significant effects on each class and any overall effect for the covariates reflecting infant temperament at 3 months. For parsimony and to establish best fit, only significant covariates (whether positive or negative reactivity) were considered in the final analyses presented (as per Langeheine et al., 1996).

Predicting 3-month Solidarity from Prenatal Predictors—Table 2 summarizes data used to establish number of classes at 3, 12, and 30 months. At 3 months, the BIC parameter was lowest in the 1-class model (138.28), owing principally to the small number of constituting parameters (5), but the bootstrapping-derived p value suggested that both the 3 and the 4 class models significantly decreased unexplained variance, hence better fitting our data. The lower p value (0.064) and lower BIC value (165.71) for the 3 class model made it the preferable choice over the 4-class model.

Table 3 outlines effects of the prenatal predictor trio on each class within the 3-class model, along with the covariate representing the baby's negative reactivity (in this analysis, positive reactivity was not significant). Wald statistics indicated that predictors had significant but different effects on the classes. As shown in Table 3, higher maternal pessimism significantly predicted lower coparental solidarity for two of the three groups (class 2, with 32% of the families, and class 3, with 18% of the families). However, also among families in our study was a significant subgroup (Class 1, constituting 50% of the sample) in which maternal pessimism did not predict coparental solidarity. Of interest is that in this subgroup of families, difficult infant temperament did explain significant variance in coparental solidarity, with lower solidarity seen in families with more difficult babies. Hence, it seems quite plausible that in this group of families, the presence of a challenging baby may have outweighed any potential organizing effects that prenatal maternal expectations might have had on subsequent coparental functioning.

What about fathers' expectations? They significantly predicted coparenting solidarity in all three subgroups, though in different ways. Negative prenatal outlooks by fathers were associated with lower solidarity in both Class 1 families (in which negative reactivity among

infants was linked with lower solidarity), and Class 2 families (where greater prenatal pessimism by mothers was also a significant predictor). In Class 3 families, however, where low solidarity was also predicted by higher prenatal maternal pessimism, a counterintuitive effect was observed for fathers' negative outlook. That is, lower coparental solidarity was actually seen when fathers had expressed outlooks that were not at all negative before the baby's arrival. Moreover, in these families, the ideas about parenting expressed by mothers and fathers had been more similar than different. While it is difficult to know precisely what was going on in this subgroup of families, one possibility is that mothers' pessimism during the pregnancy may have had something to do with their partners tendencies to gloss over or not show sufficient awareness of the potential impact the impending coparenthood transition was going to have.

Predicting 12 Month Solidarity from Prenatal Predictors—We approached predictions of the 12 and 30 month classes in the same manner as above. As it was at 3 months, the 12 month BIC parameter was lowest in the 1-class model (144.40) owing to the small number of parameters (Table 2). But again, the bootstrapping-derived p value suggested that the 2, 3, and 4 class models significantly decreased the amount of unexplained variance and better fit the data. Lower p (0.064) and BIC values (169.89), together with the desired symmetry across time points, made the 3-class model the preferable choice over the 4 class model.

We found the classes at 12 months quite interesting and interpretable. As at 3 months, we again identified a subgroup of families at 12 months for whom prenatal maternal pessimism predicted lower Coparental Solidarity. At 12 months, this subgroup was designated as Class 3 and represented 25% of the families (see Table 4). Of note, however, the unusual Class 3 profile seen at 3 months (i.e., counter-intuitive effect for fathers' negative outlooks and for Ideas about Parenting differences) did not replicate in any class at 12 months. Rather, analyses indicated that in the Class 3 subgroup identified at 12 months, greater maternal pessimism and negativity in paternal outlook significantly predicted lower 12 month solidarity (Table 4). Also among this group of families, a significant portion of the variance was explained by infants' negative and positive reactivity at three months, in the expected directions.

In Class 1 families, where there were no significant connections with any of the prenatally assessed coparenting indicators, we found a counterintuitive and significant effect of the baby's earlier temperament. That is, for this 39% of families, babies with challenging temperamental profiles at 3 months (both more negative and less positive reactivity) had parents showing greater, not lesser, solidarity (consistent with findings reported by Schoppe Sullivan and Mangelsdorf, this volume). Among such families, infant characteristics appeared to not only have washed away effects of prenatal expectancies, but also led to greater solidarity and teamwork between the coparents.

For the final group of families (Class 2, or 36% of the families), coparental solidarity was predicted only by positive temperamental features of the baby. That is, in this class of families, prenatal effects were overshadowed by infant features, with easier and better regulated babies promoting greater solidarity between the coparents. Hence, early infant temperament proved to be more important than prenatal coparenting expectations in some subgroups of families, while in others prenatal expectations continued to exert an organizing effect even through the time of the baby's first birthday.

Predicting 30 month Solidarity from Prenatal Predictors—As seen in Table 2, we had essentially parallel findings with respect to the number of classes among our families at 30 months. Again owing to the small number of parameters, the BIC parameter remained lowest in the first model (80.24) but the bootstrapping-derived p value again indicated that the 2, 3, and 4 class models significantly reduced unexplained variance and better fit the data. The lower

p value of the 3-class model (0.152), compared with the 2-Class model (p=0.254) and the lower BIC (106.40) compared with the 4-Class model (BIC=128.81) -- plus the benefit of symmetry over time -- made it the preferable choice.

In examining the pregnancy to 30 month analyses (Table 5), several things stand out. First, by this time point (30 months after the baby's arrival), prenatal pessimism among mothers no longer had a predictive effect either on the classes taken as a whole, nor in significantly discriminating between the classes. In fact, only one relationship (a counterintuitive one, linking higher prenatal pessimism by mothers to higher Coparental Solidarity in Class 3 families) was found. This said, there were two intriguing stories among the 30 month data. The first was that greater differences in parenting ideologies before the baby's arrival, only sporadically connected to 3 and 12 month outcomes for certain classes, emerged as significant predictors of low coparental solidarity for all three groups at 30 months. The second finding of note is that fathers' negative outlooks during the pregnancy resurfaced as noteworthy predictors of coparenting adjustment during toddlerhood. In two of the three classes (Class 1, 44% of the families and Class 3, 15%), Coparental Solidarity at 30 months was lower among families where men had held more negative outlooks before the baby was born. In the remaining class (Class 2, 41% of the families), paternal negative tone also had a small effect, though in the opposite direction.

Early infant temperament – in this case, positive reactivity of 3-month-olds, also remained a formative force in two of the three classes. In Class 1, where negative outlooks by fathers-to-be and larger between-parent differences in prenatal parenting ideologies predicted low coparental solidarity at 30 months, low positive reactivity by infants at 3 months also predicted low coparenting solidarity at 30 months. An opposite pattern was seen among Class 2 families. In this subgroup, coparenting solidarity was also lower when between-parent parenting ideologies had differed markedly during the pregnancy -- but in these families, paternal outlooks had not been negative, and infants had been easier (high positive reactivity). We speculated that this group might have contained some "hostile-competitive" families (McHale, 1995). That is, we wondered whether these fathers' outlooks enabled them to step in and become engaged, rather than withdrawing (which is easier to do with temperamentally easy babies) – with the result being that their involvement, in the context of different parenting ideologies, stirred problems. This hunch was supported by post-hoc analysis indicating that couples in Class 2 families had engaged in significantly more verbal sparring at 12 months than had families in either of the other two classes ($t = 2.4$, $p < .05$), and that Class 2 mothers were significantly more likely to also report speaking disparagingly about fathers to the child at 30 months ($t = 2.16$, $p < .05$).

In summary, latent class analyses indicated significant predictive power across time for the prenatal indicators of coparenting concerns and differences. In some families, these prenatal indicators continued to hold sway even 30 months after the baby's arrival. Data also suggested that between-parent differences in parenting ideologies evident during pregnancy may resurface as important organizing forces as families move from the infancy period into the toddler years. And early infant temperament also proved to be rather informative in distinguishing among different family classes and in explaining later variability in coparental adjustment for certain subgroups of families.

In the final section, we report cross-time associations in coparental solidarity for the subgroup of families who completed all three sets of assessments.

Stability of Coparental Solidarity across Time

Is there stability in Coparental Solidarity across time? Cross-time associations among Solidarity composite scores at 3, 12, and 30 months substantiated that there is. Significant

associations linked 3 month Coparental Solidarity to 12 month Solidarity ($r = .37$, $p < .05$), and 12 month to 30 month Solidarity ($r = .46$, $p < .05$). With respect to the individual constituent Cohesion and Conflict indicators, coparental Cohesion was the only such index showing significant, domain-specific cross-time stability such that greater Cohesion at 12 months foreshadowed significantly greater Cohesion at 30 months ($r = .51$, $p < .001$).

Discussion

Mark Twain once wrote that whether you expect a thing or not, you are right. Results from this study suggest that prenatal expectancies of first-time parents about future coparenting and family difficulties are not immaterial. Rather, when negative outlooks and expectancies color men's and women's representations before their baby is born, coparenting Cohesion at 3 months and Coparental Solidarity at 12 months -- more than a year after the parents expressed these views -- are lower than in other families. An objective index of between-parent differences in parenting beliefs obtained during the pregnancy likewise predicts the extent of later Solidarity. And the predictive reach of these prenatal indicators extends further still in latent class modeling analyses, where fathers' prenatal representations and differences in parenting ideologies continue to predict Coparenting Solidarity in certain classes of families even through 30 months.

This collection of findings suggests that knowledge of whether expectant couples are, or believe they are, at odds with one another as coparenting partners-to-be can help predict who will make a smoother transition to new co-parenthood and who will struggle. The fact that these associations obtained in a relatively small sample not pre-selected on the basis of clinical distress or psychopathology raises the possibility that the effect sizes documented here may very well underestimate the nature of prenatal-post-partum associations in the general population transitioning to new parenthood.

The finding that the aftereffects of prenatal expectations are somewhat less pronounced by the toddler years than they were at three or twelve months post-partum – especially in the case of mothers -- can be viewed in different ways. It is possible that by 30 months, when parents have begun to wrangle with differences between them about disciplinary actions and the child's transitioning from other to self-regulation (concerns that were not yet pressing at 3 and 12 months), the coparenting reorganization that becomes necessary in the family has as much or more to do with the couple's coparenting adjustment during the infancy period as it does with women's imagined realities back during the pregnancy. Our data certainly seem consistent with this interpretation.

Alternatively, given that latent class analyses uncovered different cross-time linkages from pregnancy to 30 months in different classes of families (which co-varied as well with infant temperament), aftereffects in those classes of families that ran counter to expectations may simply have negated overall cross-time effects at the group level. Also just as plausibly, among families confronting unanticipated life stressors after the baby was born, "real life" may have intervened to wash away prenatal aftereffects by revamping tentatively emerging coparenting structures. Our infant temperament data could be viewed as an example consistent with this interpretation. By contrast, in families that faced less significant or harsh intervening post-natal realities, prenatal factors may have continued to remain important in organizing adjustment well on into the toddler years. We appreciate that a "life stressors" explanation is not very satisfying, in that we did not systematically assess non-coparental factors in our study, but we raise it here as an important possibility to consider and pursue in subsequent longitudinal research.

The discovery that early emerging solidarity or strain in the coparental alliance are prognostic of later solidarity is also a revealing finding, lending further credence to the smattering of existing evidence suggesting that early difficulties in the coparental alliance can place families at risk for ongoing coparenting struggles. We found, as did Fivaz-Depeursinge and colleagues (1996) and Schoppe-Sullivan and colleagues (2004), that such coherence in alliance solidarity across time transcends numerous important developmental transitions (e.g. movement from the social to the intersubjective stage of infancy; transitions from family-wide concerns with cultivation of intimacy and trust to concerns with the promotion of autonomy and independence, and the setting of limits). In our estimation, this is a critically important finding, suggesting that deep family structures set in place early on in family formation appear to become more enduring organizing frameworks over time (c.f. McHale, Kazali et al., 2004).

Finally, latent class analyses provided several leads as to why it may continue to be difficult to find omnibus, group effects for variables such as infant temperament. Our analyses suggest that different groups of families may experience and respond to early infant temperament in different ways. In some families, negative reactivity or low positive reactivity by infants may draw parents to work together, as Schoppe Sullivan and Mangelsdorf (this volume) report. In others, these same features may drive a wedge between parents or hamper them from working effectively as a team. And in other families, infant characteristics may take a back seat to parent factors. Summing across these different types of family systems may obscure important infant effects on the developing coparental system and relationship. We are not at the point of offering "best practice" recommendations for capturing and documenting the full variety of different infant-family patterns, but given that infant temperament has played a role in several studies of early coparenting now, we do encourage attention to this important development in future coparenting studies.

We believe that the ability to detect cross-time coherencies in coparenting solidarity stems, in large part, from measurement approaches and strategies employed in longitudinal investigations. Through careful a priori selection of indicators that provided multiple windows into the family's coparental alliance, and relying upon a combination of observational, self-report, and narrative methodologies, this study brought together as much pertinent evidence on coparenting struggles and successes as was feasible at each time point. Had we attempted to draw a storyline from data based only on one or two of these constituting indicators at different family time points, we may not have been as capable of documenting the theme of consistency in solidarity. While other talented research groups using more streamlined assessment approaches have also documented cross-time consistency in coparenting (e.g., Schoppe Sullivan et al., 2004), a note of caution seems in order. At this still very early stage of our field, the danger comes when researchers using single-measure proxies in studies of coparenting through time do not find evidence of coherence and embrace instead the null hypothesis. For this reason, we would advocate that comprehensive and composite indicators of coparental adjustment be used in future research on coparenting and child adjustment whenever feasible.

These things said, we also acknowledge that relatively limited conclusions can be drawn from the current report. We do not feel we are yet in a position to advocate for "best" assessments. Our position, at this stage of field development, is that it is most advisable to use multiple measures to establish underlying "truths" before advocating most cost effective measures. This is especially important for theorists and researchers attempting to assess a system, rather than a particular behavior being observed. Similarly, we believe that a number of replication studies will be needed before we can select out the most substantive prenatal predictors for risk and intervention studies. We rest this conclusion in part on the relatively small sample size for this study. Although the group of families that participated in our study at two time points and the group that participated at four did not differ significantly on important demographic or family

process indicators, our four time-point sample was really far too small to offer definitive conclusions about the range of cross-time patterns that may exist.

Sample size limitations also weighed heavily in our decision to focus principally on a single composite indicator of coparental adjustment at the various time points in modeling analyses rather than pursuing, as did Fivaz-Depeursinge and colleagues (1996;Fivaz-Depeursinge & Corboz-Warnery, 1999) the notion that there may also be stability in family sub-types through time. Based on the Lausanne group's results concerning stability in different family alliance types – which were typological categories derived principally from data gathered on body formation, attention, and affect patterns during LTP assessments – we would speculate that it might also be possible to detect coherence in different coparenting types across developmental time. Such stability has been hinted at in the work of Schoppe-Sullivan and colleagues (2004).

Relatedly, and as is often the case for family researchers who advertise intensive longitudinal studies and harbor the aim of attracting a broad range of community families, it actually seems rather unlikely that our study enrolled and maintained a full range of family adjustment types and patterns. In particular, families containing at least one moderately to clinically disengaged co-parent (a subgroup of families likely to comprise a rather fair proportion of the community population) may not have volunteered for the study in the first place (see, for e.g., McHale, Lauretti, Talbot & Pouquette, 2002). For, expectant couples knew going in that a focus of the study would be on their relationship as partners and co-parents, and that significant demands would be required of their time given the multi-time-point participation. In one sense, this possible volunteer bias renders even more striking the significant cross-time patterns we nonetheless uncovered within the participant group that did enroll and stay. Equally, however, we may very well have missed out on cultivating an understanding of one or more significant family subgroups (such as disengaged or aggressive families) that could have been recruited in greater numbers with a pointed, high-risk recruitment approach.

Also painfully absent from both this investigation and the broader field of empirically-based coparenting studies are investigations enrolling substantial or exclusively ethnic minority families. In the few relevant studies that have been completed to date, coparental solidarity has surfaced as an important index of family adjustment among both African American and Hispanic samples (Brody & Flor, 1996; Lindahl & Malik, 1999). Studies of the transition to new co-parenthood among ethnically diverse samples are needed to establish the extent to which the cross-time patterns hinted at in this investigation have equal applicability and significance for two-parent families from such groups. The extent to which new mothers' pre-natal representations of post-baby co-caregiving support predict post-natal co-caregiving adjustment in families where the second caregiver is not the child's father, but rather a grandparent, would also be of significant value in theory testing and development.

In conclusion, solidarity and support between coparenting adults during the early months and years after a baby's arrival help the family cope with the inevitable strains and stresses of parenthood. Coparental solidarity also creates a family climate that some limited data have indicated may be maintained into the toddler years, when children struggle in earnest with the challenges of internalizing standards and developing effective self-regulatory skills. Findings from the current study suggest that precursors of early coparental adjustment can be found in the prenatal imaginings of first-time parents, and that initial successes at cultivating strong and supportive coparental alliances set a stage for more positive later adjustment in many families. In this regard, more intensive empirical and clinical attention to both representational and observational indicators of early coparental solidarity and support by infant socialization researchers seems clearly in order. Such inquiries promise to help crystallize our understanding

of the family systems into which infants are born and into which they come to exert their own influences.

References

Abidin R, Brunner J. Development of a parenting alliance inventory. Journal of Clinical Child Psychology 1995;24:31–40.

Bearss K, Eyberg SM. A test of the parenting alliance theory. Early Education and Development 1998;9:179–185.

Belsky J. Exploring individual differences in marital change across the transition to parenthood: The role of violated expectations. Journal of Marriage and the Family 1985;47:1037–1044.

Belsky J, Crnic K, Gable S. The determinants of coparenting in families with toddler boys: Spousal differences and daily hassles. Child Development 1995;66:629–642. [PubMed: 7789192]

Belsky J, Hsieh K. Patterns of marital change during the early childhood years: Parent personality, coparenting, and division of labor correlates. Journal of Family Psychology 1998;12:511–528.

Block, J. Lives through Time. Berkeley: Bancroft Press; 1971.

Brody, G.; Flor, D. Coparenting, family interactions, and competence among African American youth. In: McHale, J.; Cowan, P., editors. Understanding how family level dynamics affect children's development: Studies of two parent families. San Francisco, CA: Jossey Bass Inc, Publishers; 1996. p. 77-92.

Cowan, P.; Cowan, C. When partners become parents: The big life change for couples. New York, NY: Basic Books, Inc; 1992.

Cowan, P.; Cowan, C.; Schulz, M.; Heming, G. Prebirth to preschool family factors predicting children's adaptation to kindergarten. In: Parke, R.; Kellam, S., editors. Exploring family relationships with other social contexts: Advances in family research. 4. Hillsdale, NJ: Lawrence Erlbaum Associates; 1994. p. 75-114.

Cowan, P.; McHale, J. Coparenting in a family context: Emerging achievements, current dilemmas, and future directions. In: McHale, J.; Cowan, P., editors. Understanding how family-level dynamics affect children's development: Studies of two-parent families. San Francisco: Jossey-Bass; 1996. p. 93-106.

Cromwell R, Peterson G. Multisystem-multimethod family assessment in clinical contexts. Family Process 1983;22:147–163. [PubMed: 6873260]

Davies P, Cummings EM, Winter M. Pathways between profiles of family functioning, child security in the interparental subsystem, and child psychological problems. Development & Psychopathology 2004;16:525–550. [PubMed: 15605624]

Delmore-Ko P, Pancer SM, Hunsberger B, Pratt M. Becoming a parent: The relation between prenatal expectations and postnatal experience. Journal of Family Psychology 2000;14:625–640. [PubMed: 11132485]

Deutsch F, Ruble DN, Fleming A, Brooks-Gunn J, Stagnor C. Information-seeking and maternal self-definition during the transition to motherhood. Journal of Personality and Social Psychology 1988;55:420–431. [PubMed: 3171914]

Diamond D, Heinicke C, Mintz J. Separation-individuation as a family transactional process in the transition to parenthood. Infant Mental Health Journal 1996;17:24–42.

Elliston, D.; Alvarez, E.; McHale, J. An observationally based assessment of co-parental dynamics in childrearing; Paper presented at the meeting of the American Psychological Association; Washington, DC. 2005 Aug.

Feinberg M. The internal structure and ecological context of coparenting: A framework for research and intervention. Parenting: Science & Practice 2003;3:95–131.

Fivaz-Depeursinge, E.; Corboz-Warnery, A. The primary triangle: A developmental, systems view of fathers, mothers, and infants. New York: Basic Books; 1999.

Fivaz-Depeursinge, E.; Frascarolo, F.; Corboz-Warnery, A. Assessing the triadic alliance between fathers, mothers, and infants at play. In: McHale, J.; Cowan, P., editors. Understanding how family level dynamics affect children's development: Studies of two parent families. San Francisco: Jossey Bass; 1996. p. 27-44.

Fonagy P, Steele H, Steele M. Maternal representations of attachment during pregnancy predict the organization of infant-mother attachment at one year of age. Child Development 1991;62:891–905. [PubMed: 1756665]

Forgatch, M.; DeGarmo, D. Two faces of Janus: Cohesion and conflict. In: Cox, M.; Brooks-Gunn, J., editors. Conflict and cohesion in families: Causes and consequences. Mahwah, NJ: Lawrence Erlbaum Associates; 1999. p. 167-184.

Frank S, Olmstead C, Wagner A. Child illness, the parenting alliance, and parenting stress. Journal of Pediatric Psychology 1991;16:361–371. [PubMed: 1890559]

Frosch C, Mangelsdorf S, McHale JL. Correlates of marital behavior at 6 months post-partum. Developmental Psychology 1998;34:1438–1449. [PubMed: 9823523]

Frosch C, Mangelsdorf S, McHale JL. Marital behavior and the security of preschooler-parent attachment relationships. Journal of Family Psychology 2000;14:144–161. [PubMed: 10740688]

Gable S, Belsky J, Crnic K. Coparenting during the child's 2nd year: A descriptive account. Journal of Marriage & the Family 1995;57:609–616.

Gottman J, Notarius C. Marital research in the 20th century and a research agenda for the 21st century. Family Process 2002;41:159–197. [PubMed: 12140959]

Hayden L, Schiller M, Dickstein S, Seifer R, Sameroff A, Miller I, Keitner G, Rasmussen S. Levels of family assessment, I: Family, marital, and parent-child interaction. Journal of Family Psychology 1998;12:7–22.

Hackel LS, Ruble DN. Changes in the marital relationship after the first baby is born: Predicting the impact of expectancy disconfirmation. Journal of Personality and Social Psychology 1992;62:944–957. [PubMed: 1619550]

Katz L, Low S. Marital violence, co-parenting, and family-level processes in relation to children's adjustment. Journal of Family Psychology 2004;18:372–382. [PubMed: 15222844]

Leary A, Katz LF. Coparenting, family-level processes, and peer outcomes: The moderating role of vagal tone. Development & Psychopathology 2004;16:593–608. [PubMed: 15605627]

Lewis J, Owen M, Cox M. The transition to parenthood, III: Incorporation of the child into the family. Family Process 1988;27:411–421. [PubMed: 3234527]

Lindahl KM, Clements M, Markman H. Predicting marital and parent functioning in dyads and triads: A longitudinal investigation of marital processes. Journal of Family Psychology 1997;11:139–151.

Margolin G, Gordis E, John R. Coparenting: A link between marital conflict and parenting in two-parent families. Journal of Family Psychology 2001;15:3–21. [PubMed: 11322083]

Magidson, J.; Vermunt, JK. Latent Class Models. In: Kaplan, D., editor. The Sage handbook of quantitative methodology for the social sciences. Thousand Oaks, CA: Sage Publications; 2004. p. 175-198.

McConnell M, Kerig P. Assessing coparenting in families of school-age children: Validation of the Coparenting and Family Rating System. Canadian Journal of Behavioural Science 2002;34:4–58.

McHale J. Co-parenting and triadic interactions during infancy: The roles of marital distress and child gender. Developmental Psychology 1995;31:985–996.

McHale J. Overt and covert coparenting processes in the family. Family Process 1997;36:183–210. [PubMed: 9248827]

McHale, J.; Berkman, J.; Kavanaugh, K.; Carleton, M.; Alberts, A. Discovery and construction: Uncovering early family-infant dynamics through the use of observational methodologies. In: Lightfoot, C.; Lyra, M.; Valsiner, J., editors. Challenges and strategies for studying human development in cultural contexts. Stamford, CT: Information Age Publications; 2007.

McHale J, Fivaz-Depeursinge E. Understanding triadic and family group process during infancy and early childhood. Clinical Child and Family Psychology Review 1999;2:107–127. [PubMed: 11225931]

McHale J, Johnson D, Sinclair R. Family-level dynamics, preschoolers' family representations, and playground adjustment. Early Education and Development 1999;10:373–401.

McHale J, Kazali C, Rotman T, Talbot J, Carleton M, Lieberson R. The transition to co-parenthood: Parents' pre-birth expectations and early coparental adjustment at three months post-partum. Development and Psychopathology 2004;16:711–733. [PubMed: 15605633]

McHale, J.; Khazan, I.; Erera, P.; Rotman, T.; DeCourcey, W.; McConnell, M. Coparenting in diverse family systems. In: Bornstein, M., editor. Handbook of Parenting. 2. New Jersey: Erlbaum; 2002. p. 75-107.

McHale, J.; Kuersten, R.; Lauretti, A. New directions in the study of family-level dynamics during infancy and early childhood. In: McHale, J.; Cowan, P., editors. Understanding how family-level dynamics affect children's development: Studies of two-parent families. San Francisco: Jossey-Bass; 1996. p. 5-26.

McHale J, Kuersten-Hogan R, Lauretti A, Rasmussen J. Parental reports of coparenting and observed coparenting behavior during the toddler period. Journal of Family Psychology 2000;14:220–236. [PubMed: 10870291]

McHale J, Kuersten-Hogan R, Rao N. Growing points in the study of coparenting relationships. Journal of Adult Development 2004;11:221–235.

McHale, J.; Kuersten-Hogan, R.; Lauretti, A. Evaluating coparenting and family-level dynamics during infancy and early childhood: The Coparenting and Family Rating System. In: Kerig, P.; Lindahl, K., editors. Family observational coding systems: Resources for systemic research. New Jersey: Erlbaum; 2000. p. 151-170.

McHale, J.; Lauretti, A.; Talbot, J.; Pouquette, C. Retrospect and prospect in the psychological study of coparenting and family group process. In: McHale, J.; Grolnick, W., editors. Retrospect and prospect in the psychological study of families. New Jersey: Lawrence Erlbaum Associates; 2002. p. 127-165.

McHale J, Rasmussen J. Coparental and family group-level dynamics during infancy: Early family precursors of child and family functioning during preschool. Development and Psychopathology 1998;10:39–58. [PubMed: 9524807]

Ruble DN, Fleming AS, Hackel LS, Stagnor C. Changes in the marital relationship during the transition to first-time motherhood: Effects of violated expectations concerning division of household labor. Journal of Personality and Social Psychology 1988;55:78–87. [PubMed: 3262152]

Schoppe-Sullivan S, Mangelsdorf S, Frosch C, McHale JL. Associations between coparenting and marital behavior from infancy to the preschool years. Journal of Family Psychology 2004;18:194–207. [PubMed: 14992621]

Schoppe S, Mangelsdorf S, Frosch C. Coparenting, family process, and family structure: Implications for preschoolers' externalizing behavior problems. Journal of Family Psychology 2001;15:526–545. [PubMed: 11584800]

Sroufe LA. The coherence of individual development: Early care, attachment, and subsequent developmental issues. American Psychologist 1979;34:834–841.

Sroufe LA, Waters E. Attachment as an organizational construct. Child Development 1977;48:1184–1199.

Stright A, Neitzel C. Beyond parenting: Coparenting and children's classroom adjustment. International Journal of Behavioral Development 2003;27:31–39.

Sturge-Apple M, Davies P, Boker S, Cummings EM. Interparental discord and parenting: Testing the moderating roles of child and parent gender. Parenting: Science & Practice 2004;4:361–380.

Tronick EZ, Gianino A. Interactive mismatch and repair: Challenges to the coping infant. Zero to Three 1986;6(3):1–6.

VanEgeren L. Prebirth predictors of coparenting experiences in early infancy. Infant Mental Health Journal 2003;24:278–295.

Van Egeren L. The development of the coparenting relationship over the transition to parenthood. Infant Mental Health Journal 2004;25:453–477.

Wedel, M.; DeSarbo, WS. A review of recent developments in latent class regression models. In: Bagozzi, RP., editor. Advanced methods of marketing research. Cambridge: Blackwell Publishers; 1994. p. 352-388.

von Klitzing K, Simoni H, Amsler F, Burgin D. The role of the father in early family interactions. Infant Mental Health Journal 1999;20:222–237.

Waterston, L.; Babigian, R.; McHale, J. Parents' stories about their families reflect individual and family functioning at infant age 12 months; Paper presented at the meetings of the World Association for Infant Mental Health; Amsterdam, the Netherlands. 2002 Jul.

Weissman S, Cohen R. The parenting alliance and adolescence. Adolescent Psychiatry 1985;12:24–45. [PubMed: 4003682]

Table 1

Descriptive Statistics for all constructs and measures

	Range	Mean	SD
Pregnancy			
Mothers			
Perceived difference - Ideas about Parenting	1–89	31.60	17.26
Who Does What – expected/ideal difference	2–76	24.92	14.38
Family of future/negative outlook	1–7	3.67	1.32
Fathers			
Perceived difference - Ideas about Parenting	0–102	33.20	24.30
Who Does What – expected/ideal difference	0–61	18.86	13.92
Family of future/negative outlook	1–7	3.44	1.26
3 months			
Coparenting during Triadic Family Interaction			
Family Warmth	1–5	3.48	.97
Coparental Cooperation	2–5	3.50	.82
Coparental Competition	1–4	1.96	.89
Verbal sparring between Coparents	1–4	1.87	.90
Coparenting during Still Face Stressor			
Coparental warmth	1–5	2.44	1.1
Coparental Cooperation	1–5	2.77	1.0
Coparental Competition	1–5	1.59	.94
Verbal sparring between Coparents	1–5	1.31	.77
Coparenting Interactions during Who Does What			
Positive affect between Partners	0–3	2.20	.82
Negative affect between Partners	0–3	.63	.91
Establishment of Consensus	0–3	1.90	.87
Defensiveness of Mother	0–2	.67	.80
Defensiveness of Father	0–3	.82	1.07
Baby's Temperament at 3 months (IBQ averages)			
Soothability	3.1–8.0	5.41	.90
Smiling and Laughter	2.7–7.1	4.85	.92
Duration of Orienting	2.4–9.3	4.39	1.13
Fear	1.6–6.5	3.85	1.06
Distress to Limitations	2.3–6.1	3.80	0.84
12 months			
Self-Report Coparenting Scale (McHale, 1997)			
Conflict reported by Mother	4–13	6.91	2.32
Conflict reported by Father	3–11	5.44	1.98
Disparagement reported by Mother	2–12	6.41	2.07
Disparagement reported by Father	3–11	5.03	1.81
Family Integrity reported by Mother	17–47	40.44	5.40
Family Integrity reported by Father	29–49	41.10	4.94
Coparenting during Triadic Family Interactions			
Warmth between partners	1–5	2.73	.89
Cooperation between parents	2–5	3.34	.99
Competition between parents	1–5	2.95	1.38
Mother's endorsement of father's parenting	2–5	3.88	.84
Father's endorsement of mother's parenting	2–5	3.98	.47
Difference in mother/father investment	0–2	.71	.60
Difference in mother/father warmth	0–2	.88	.68
Verbal sparring between coparents	1–5	1.56	1.16
Quality of verbal sparring*	0–3	.30	.72
Child-centeredness vs. parent-centeredness	1–5	3.71	1.29
Coparenting Interview			
Positive Tone in Mother's Narrative	1–4	2.17	.81
Positive Tone in Father's Narrative	1–4	2.17	.92
Negative Tone in Mother's Narrative	1–4	1.40	.68
Negative Tone in Father's Narrative	1–4	1.28	.56
Mean (per-item) difference in Ideas About Parenting	1.2–2.8	1.96	.34
30 months			
Coparenting Scale			
Conflict reported by Mother	6–18	11.41	3.16
Conflict reported by Father	5–23	10.42	4.37
Family Integrity reported by Mother	30–48	40.62	4.11
Family Integrity reported by Father	31–49	38.58	4.74
Coparenting during Family Interactions			
Warmth between partners	1–5	2.58	.76
Cooperation between parents	1–5	3.16	1.19
Competition between parents	1–5	3.03	1.49
Mother's endorsement of father's parenting	2–5	3.84	.82
Father's endorsement of mother's parenting	3–5	4.03	.41
Difference in mother-father investment	0–3	1.13	.99
Difference in mother-father warmth	0–4	1.23	1.26
Verbal sparring	1–5	2.48	1.31

	Range	Mean	SD
Quality of verbal sparring*	0–3	1.14	.85
Parent vs. child centeredness	1–5	2.71	1.04
Mean (per-item) difference in Ideas about Parenting	1.2–2.7	1.96	.34

* Quality of verbal sparring was recoded to fit a continuous variable pattern

Table 2

Model comparison for prenatal predictors of 3, 12, and 30 month coparenting

3 Months			
Model	**BIC**	**N of Parameters**	**Bootstrap p-value**
1 Class	138.28	6	-
2 Classes	147.16	13	0.024
3 Classes	165.71	20	0.064
4 Classes	190.59	27	0.040
12 Months			
Model	BIC	N of Parameters	Bootstrap p-value
1 Class	144.40	7	-
2 Classes	158.64	15	0.014
3 Classes	169.89	23	0.064
4 Classes	198.64	31	0.026
30 Months			
Model	BIC	N of Parameters	Bootstrap p-value
1 Class	80.24	5	-
2 Classes	84.21	11	0.254
3 Classes	106.40	17	0.152
4 Classes	128.81	23	0.148

Table 3

Predictors of 3-month Coparenting Solidarity, by classes

	Class 1	Class 2	Class 3	Wald Across	Wald b/ w Classes
Mother's prenatal pessimism	0.33	−0.52**	−1.80**	184.04**	62.08**
Father's prenatal negative outlook	−0.36**	−0.18*	1.10**	155.06**	138.57**
Extent of difference in parenting beliefs	−0.26	0.32	1.90**	14.53**	8.65*
Negative reactivity of the baby at 3 mo	−1.67*	0.84	0.84	5.88	N/A

* p<.05

** p<.01

Table 4

Predictors of 12 month Coparenting Solidarity, by classes

	Class 1	Class 2	Class 3	Wald Across	Wald b/ w Classes
Mother's prenatal pessimism	0.06	−0.13	−0.73**	19.02**	14.99**
Father's prenatal negative outlook	−0.01	−0.02	−0.58**	16.82**	15.00**
Extent of difference in parenting beliefs	0.02	−1.14	1.12	4.23	4.28
Negative reactivity of the baby at 3 mo	3.18*	−1.23	−1.95*	6.21*	N/A
Positive reactivity of the baby at 3 mo	−5.17*	2.29*	2.88*	6.17*	N/A

* p<.05

** p<.01

Table 5

Prenatal predictors of 30 month Coparenting Solidarity, by classes

	Class 1	Class 2	Class 3	Wald Across	Wald b/ w Classes
Mother's prenatal pessimism	−0.04	0.01	1.16*	4.9	4.65
Father's prenatal negative outlook	−0.63**	0.26**	−1.84**	242.84**	206.71**
Extent of difference in parenting beliefs	−0.75*	−1.41**	−3.55*	27.19**	4.18
Positive reactivity of the baby at 3 mo	1.88*	−1.93*	0.05	5.72	N/A

* p<.05

** p<.01