

Parental Divorce and Children's Attachment Security: Downstream Effect on Peer Relations

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Abstract. Children's first years of school are a sensitive period when peer groups form and early adjustment can set trajectories for inclusion or isolation. Drawing on attachment theory and process-oriented models of family change, this review synthesizes evidence that divorce-related processes, shape children's attachment security, which in turn forecasts peer functioning at school entry. Specifically focused on caregiving organizations and the interparental climate. Studies indicate that frequent infant overnights without coordinated routines are associated with higher mother-child insecurity, and that ongoing post-divorce conflict increases children's fear of abandonment. In intact families, hostile marital dynamics undermine, and positive engagement supports, preschool attachment security via spillover to parenting. Meta-analytic and longitudinal findings link early attachment security to peer competence, with self-regulatory capacities (e.g., executive function) providing a plausible mechanism. Within classrooms, teachers can operate as secondary secure-base figures; attachment-relevant behaviors such as constructive negotiation with teachers relate to higher peer acceptance and visibility. The evidence supports a two-setting strategy: at home, emphasize predictable routines, coordinated co-parenting, and conflict reduction; at school, strengthen teacher sensitivity, warm structure, and explicit coaching of regulation and positive negotiation. Together, these practices can stabilize children's sense of security and promote peer inclusion during the transition to formal schooling.

Keywords: Attachment Security, Parental Divorce, Interparental Conflict, Teacher-Child Relationship, Peer Relations

1. Introduction

Children's first years in school are a critical point with peer groups forming quickly, and early classroom adjustment can set trajectories for inclusion or isolation. Attachment theory states that when caregivers are emotionally available and coordinated, children are better able to regulate distress and engage with peers. When availability is inconsistent, emotional regulation and peer functioning suffer [1,2]. In everyday life, family transitions such as divorce are common and can reorganize both caregiving routines and the interparental climate. Process-oriented model suggests it is these processes, rather than the legal act that formally ends the marriage (e.g. court-issued divorce decree), that matter for children's attachment security [3]. Specifically, frequent infant overnights with a nonresident parent, in the absence of strong co-parenting coordination, have been linked to

higher mother–child insecurity, and post-divorce conflict predicts children’s fear of abandonment and later symptoms [3,4]. Beyond the home, teachers can serve as a secondary secure base, and attachment-relevant behaviors toward teachers (e.g., positive negotiation vs. avoidance) are associated with peer social preference in preschool [5,6]. Mechanistically, self-regulation appears to bridge security and social functioning: inhibitory control relates to security and helps explain behavior regulation in the classroom [7,8].

2. Key concepts

2.1. Attachment security

Attachment security refers to a child’s expectations that the caregiver will be available and responsive, specifically serving as a secure base and a safe haven under stress [9]. It’s a child-level attribute of a caregiver-child relationship that’s distinct from temperament. According to attachment theory, internal working models formed in early caregiving guide relationship behavior and, in turn, shape later social outcomes like peer relations, emotional regulation and prosocial behaviors [9].

2.2. Parental divorce

Parental divorce refers to the end of a cohabiting parental relationship, followed by changes in family roles and living arrangements [4,10]. In this paper, parental divorce is treated as a legal event (i.e., divorced vs not), distinct from ongoing processes such as interparental conflict, coparenting quality, and caregiving arrangements. Consistent with process-oriented models, children’s outcomes depend more on the post-divorce family climate and caregiving arrangements than on the legal event itself [3]. Accordingly, this paper focuses on the ongoing processes and how they shape children’s attachment security.

2.3. Interparental quality

Coparenting quality captures how well parents who share a child coordinate roles, support or undermine one another, and manage disagreements in the child’s presence [1,4]. In post-separation/divorce samples, coparenting is commonly measured with parent-report items capturing frequency of conflict with the other parent, overall relationship quality with the other parent, and perceived quality of the other parent’s parenting.

2.4. Peer relations at school entry

Peer relations at school entry refers to children’s functioning among classmates within the classroom in kindergarten/Grade 1 [2]. It encompasses peer acceptance, visibility/prominence, and proximal social behaviors [2,5]. In this paper, peer relations is treated as a child-level construct, distinct from teacher–child relations.

3. Parental divorce and attachment security

The literature points to two factors linking parental divorce to children’s attachment security: early caregiving arrangement (e.g., infant overnights) and the family climate (e.g., marital behavior, interparental conflict). Aligning the first factor, Tornello et al. used the U.S. Fragile Families and Child Wellbeing Study (FFCWS) to construct age-1 (infant) and age-3 (toddler) subsamples of

noncohabiting parents drawn from birth cohorts in 20 large U.S. cities [4]. Attachment security was assessed at age 3 with a mother-rated, adapted Toddler Attachment Q-Sort (TAQ) derived from the Attachment Q-Set (AQS). Overnight frequency with nonresident fathers was coded age-specifically as day-contact/rare, some, or frequent; for instance, “frequent overnights” meant 52-256 nights for infants (age 1) and 128-256 nights for toddlers (ages 1-3). Among infants, frequent overnights were linked to higher mother–child attachment insecurity (~43%) than either day-only contact (~25%) or some overnights (~16%). This difference held after adjusting for demographics, interparental conflict, coparenting quality, and father quality. For toddlers, insecurity was the highest with frequent overnights, but group differences were not significant. Tornello and colleagues conclude that the infant pattern points to stable caregiving as the key factor, not the sheer number of overnights. Attachment was measured once at age 3, and overnight patterns were observational (nonrandom); therefore, the study cannot test within-child change or establish causality.

Independent of early caregiving arrangements, evidence from intact families shows that the family climate itself, like marital behavior, predicts preschool attachment. In a two-wave, longitudinal study, Frosch et al. followed 53 families from 6 months to age 3 [1]. The sample was predominantly upper-middle-class, and analyses did not include socioeconomic covariates. At 6 months, parents completed a couple discussion and a triadic family-play task. Trained coders rated behaviors on 7-point scales and derived composites of Marital Conflict and Positive Engagement (discussion), and Marital Harmony and Interparental Hostility (play). At age 3, parents completed a joint discussion with the child present, coded for Positive Engagement and Marital Conflict. Each parent also completed a parent-child puzzle task, which coders rated for warm/supportive vs. hostile parenting. Meanwhile, Attachment security was assessed via the 90-item Attachment Q-Sort (AQS), completed independently by mothers and fathers under supervision, yielding separate child–mother and child–father security scores. Results showed that interparental hostility at 6 months predicted lower mother–child security at age 3. At age 3, higher marital conflict related to lower security with both parents, whereas more positive marital engagement related to higher father–child security. In particular, mothers’ parenting mediated the associations between marital climate and mother–child attachment security, which fits the family-systems spillover account and the core prediction of Emotional Security Theory. In these frameworks, affect and behavior in the interparental relationship carry into parent–child interactions: when parents are in frequent or hostile conflict, caregivers tend to be less warm, sensitive, and consistent, reducing their emotional availability and thereby weakening children’s secure-base use and attachment security; conversely, positive marital engagement supports more regulated, emotionally available parenting and, in turn, higher security. Together with Tornello et al.’s evidence on caregiving organization [4], Frosch et al. provide evidence indicating that the risk often attributed to some early caregiving arrangements likely reflects the marital climate surrounding those arrangements rather than the actual arrangements [1].

Focused on IPC, O’Hara et al. studied 559 youth (ages 9–18) from divorced or separated families in four U.S. Southwest counties, using three waves of data (baseline, ~3-month posttest, 10-month follow-up) [3]. At baseline, IPC was treated as a child-reported latent factor combining Children’s Perception of Interparental Conflict Scale (CPIC) frequency/intensity, Caught-in-the-Middle, and badmouthing items, capturing both exposure to and interpretation of conflict. Fear of abandonment was assessed at baseline and again about three months later with the Children’s Attitude Toward Parental Separation (CAPSI). At the 10-month follow-up, outcomes were assessed with the Brief Problem Monitor (BPM), producing Internalizing scores (anxious/depressed, withdrawn, somatic complaints) and Externalizing scores (rule-breaking, aggressive behavior) via child, parent, and teacher reports. The moderator, parent–child relationship quality, was operationalized as a child-

reported warmth factor (communication, involvement/routines, acceptance/monitoring). The findings showed that higher baseline interparental conflict predicted greater fear of abandonment three months later, and that higher abandonment fear predicted more internalizing (child and teacher reports) and more externalizing (teacher reports) at ten months. Effects were strongest for teacher ratings, and conflict at follow-up was also positively associated with externalizing, highlighting the importance of ongoing conflict. Moderation tests indicated buffering by relationship warmth. Instead, a father-specific pattern emerged in which conflict predicted more abandonment fear when father–child warmth was high. Interpreted through Emotional Security Theory, abandonment fear functions as the divorce-related threat, interpreted by which conflict undermines children’s felt security at home. Although attachment security was not measured directly, abandonment fear reduced confidence in caregiver availability, making the results directly relevant to attachment.

Extending the child-focused evidence on caregiving organization and interparental climate into adulthood, Coleman and colleagues surveyed 1,360 parents who had experienced estrangement from an adult child (ages 18 and above). Parents reported marital status (still married to the other biological parent, remarried, divorced) and whether the parent–adult-child relationship was reconciled or remained estranged. They completed brief Hazan–Shaver attachment prototypes (secure/avoidant/anxious) for self, the other parent, and the adult child—rated 1–5 and averaged to index perceived attachment security. Findings show that still-married parents reported higher self/partner security, and reconciled families reported higher security than those still estranged. Importantly, path analysis showed no direct association between marital status and reconciliation; rather, remaining married was related to higher perceived security among family members, which in turn related to reconciliation. Taken together, these findings suggest that legal marital status largely serves as an indicator of the underlying processes, such as caregiving arrangements and interparental behavior, that shape children’s attachment security. As such, across the lifespan, perceived family security better predicts whether damaged bonds are repaired rather than marital status. Because the study was cross-sectional and based on online self-reports, causal inference and generalizability are limited; longitudinal, multi-informant studies are needed to test these pathways.

4. Attachment security and peer relations

Early parent-child attachment security is positively associated with children’s peer competence. In a comprehensive meta-analysis, Groh and colleagues synthesized 80 independent samples ($N = 4,441$) drawn from 66 studies spanning infancy through early adolescence. Attachment was assessed exclusively with standardized observational measures like the Strange Situation Procedure (SSP), the Attachment Q-Sort (AQS), and the Cassidy–Marvin and Main–Cassidy preschool systems. Moreover, peer competence was measured via multiple methods and informants, including parent/teacher/child questionnaires, peer sociometrics, and trained observations. Coders differentiated friend vs. non-friend interactions and group vs. dyadic contexts. Across 80 independent samples, early attachment security showed a moderate association with peer competence among children. Moderator tests indicated that this association remained stable from infancy through early adolescence and did not weaken with longer lags between attachment and peer assessments. Moreover, the three insecure subtypes (avoidance, resistant, and disorganized) were each similarly linked with lower peer competence, such as lower peer acceptance and lower quality peer interactions (e.g. less helping behavior), highlighting that security itself, rather than differences among insecure styles, is the key correlate of adaptive peer functioning.

Meta-analytic study shows that early attachment security reliably predicts higher peer competence. To clarify a plausible mechanism, Heikamp et al. examined whether children’s

inhibitory control helps explain links from security to early moral self-regulation [7]. Eighty-two German kindergarteners (ages 4–6) completed two lab visits. At Visit 1, mothers rated child security with the German Attachment Q-Sort and assessed children's internalization of rules with the My Child questionnaire, which captures four facets: how consistently the child regulates everyday behavior, how concerned the child is when others break rules, how readily the child confesses after wrongdoing, and how willing the child is to make amends. At Visit 2, children performed a stop-signal task that produced a stop-signal reaction time (SSRT), a performance-based index of inhibitory control that accounts for each child's own go-trial speed. Inhibitory control correlated positively with attachment security and, among the internalization facets, most strongly with behavior regulation. Controlling for age, gender, and socioeconomic status, inhibitory control remained as a predictor of behavior regulation. Bias-corrected bootstrap mediation supported a small but reliable indirect path: higher attachment security related to better inhibitory control, which in turn predicted stronger behavior regulation, accounting for about 5% of its variance. These results fit an attachment account in which secure attachment provides a regulatory base, for instance, calmer baseline arousal, sustained attention, and confidence in caregiver availability, that helps children inhibit impulsive responses when rules or social demands require it. Stronger inhibition then supports everyday self-management (self-control, turn-taking, cooperation, and conflict de-escalation), offering a plausible route by which security translates into the peer competence observed in the broader literature.

Following 102 two-parent U.S. families across nearly five years, from infancy to kindergarten, Bendel-Stenzel et al. assessed infants' anger proneness at 7 months [8]. Attachment security to each parent at 15 months using observer-rated AQS; and self-regulation at 67 months in parallel, videotaped mother and father child lab sessions. Self-regulation was separated into two parts: a decontextualized executive function, and a relationship-specific compliance with parental requests/prohibitions. Across models, attachment security at 15 months predicted stronger EF at 67 months in both mother-child and father-child analyses, and girls showed higher EF on average, underscoring attachment security as a developmental foundation for cognitive regulation. Regarding compliance with mothers, security interacted with infant anger proneness, showing heightened sensitivity to context: among highly anger-prone infants, low security predicted poorer compliance, whereas high security predicted better-than-average compliance. No comparable security or interaction effects emerged for father-related compliance, possibly reflecting role-specific interaction patterns. EF and compliance were only modestly correlated, suggesting partly distinct regulatory systems (e.g., general cognitive control vs. relationship-specific compliance).

The evidence above links early attachment security to peer competence and suggests that early security supports inhibitory control, executive functioning, and compliant self-management that, in turn, determines peer competence. When parental separation or divorce threatens this base, other trusted adults can potentially support regulation and exploration. In classrooms, teachers can serve as secure-base figures, offering reliable support that may counteract insecurity originating at home. It therefore turns to teacher–child security and peers, asking whether secure teacher relationships buffer divorce-related risk and promote peer acceptance and visibility.

Spilt and Koomen combined three decades of research on teacher–child relationships in school settings, covering studies from preschool through secondary school across multiple cultural contexts [6]. Using a theory-guided narrative approach (rather than a meta-analysis), they organize the field into five strands: how teacher–child security is conceptualized and assessed; teachers' secure-base support; safe-haven functions and links to self-regulation; (dis)continuity with parent attachment; and the roles of teacher sensitivity and mentalization. Drawing on naturalistic observations, teacher

and child reports, and narrative tasks, the review compares findings across informants and methods. The evidence showed that teachers can serve as secure-base figures in classrooms, fostering children's emotional security, task engagement, and autonomous exploration. Greater teacher sensitivity and mentalization are consistently associated with children's emotional security, exploratory engagement, and stronger regulatory functioning. However, the lack of dyadic, classroom-based observational studies points to a need for longitudinal, multi-method designs that trace causal pathways to peer outcomes, as the current evidence base is largely narrative with incomplete cross-measure convergence.

Prino et al. help close this gap by pairing naturalistic, observer-coded attachment behaviors (e.g., positive vs. difficult negotiation) with peer nominations of social preference across 25 preschools [5]. Specifically, Prino et al. conducted a cross-sectional study with 261 Italian preschoolers in northern Italy, taught by 28 female teachers who were familiar with the children [5]. Trained observers conducted naturalistic classroom observations twice weekly for two hours over two weeks and completed the Italian Attachment Q-Sort for teacher-child relationships. Additionally, coders derived five behavioral dimensions: using the teacher as a secure base, tendency to avoid the teacher, seeking comfort from the teacher, engaging in constructive back-and-forth with the teacher ("positive negotiation"), and showing oppositional or unproductive exchanges ("difficult negotiation"). Peer standing was assessed with peer nominations in class, yielding two indices: social preference (how much a child is liked relative to disliked) and social impact or visibility (how often a child is named overall). Older children were more preferred and more visible among peers, likely because they interacted more and were recognized and nominated more often by classmates. Controlling for age, positive negotiation with the teacher was associated with higher social preference for girls and boys, whereas difficult negotiation predicted greater social impact for boys only. The other attachment dimensions, like secure-base use, avoidance, and comfort seeking, showed weak or nonsignificant links once all predictors were entered together. Expected mean-level gender differences also emerged in which boys showed more avoidance and difficult negotiation, while girls showed more comfort seeking and positive negotiation. The main limitation is the cross-sectional design; because attachment behaviors and peer status were assessed at the same time, the study cannot establish temporal order or causality. Therefore, longitudinal or intervention work is needed to test direction and mechanisms.

5. Discussion and suggestion

Studies showed that children's attachment security is organized by caregiving coordination and the interparental climate, and this security carries forward to peer relations. In parental divorce, frequent infant overnights with a nonresident parent during the first year of life are linked to higher mother-child insecurity [4]. After divorce, interparental conflict increases children's fear of abandonment, which mediates prospective mental-health risk [3]. In intact families, observed marital hostility undermines and positive engagement supports preschool attachment, with maternal parenting partially mediating these links [1]. Meta-analytic evidence shows a moderate association between early attachment security and peer competence that endures into early adolescence, with all insecurity subtypes linked to lower peer competence [2]. Self-regulation is a plausible, core mechanism linking attachment to adaptive peer behavior. Secure attachment is associated with stronger inhibitory control, which in turn promotes better behavior regulation [7]. In classrooms, attachment-relevant behaviors toward teachers, such as comfort seeking and positive negotiation, are associated with higher peer social preference, pointing to a secondary secure-base route to peer competence [5].

Taken together, a two-setting strategy, home and classroom, is the most sensible solution forward. In infancy, custody plans should emphasize predictable, coordinated routines rather than assuming that “more overnights” is universally beneficial. When infant overnights are used, couple them with clear co-parenting plans so the child experiences consistent caregiver availability across homes. For divorced families, make interparental conflict (IPC) reduction a central goal and address children’s fear of abandonment directly through calm reassurance and reliable follow-through on contact schedules. In intact and stepfamilies, it is recommended pairing couple-focused work (conflict management and positive engagement) with parenting coaching, since marital climate spills over into caregiving and then attachment; this dual-track approach is likely to provide larger gains than parenting programs alone. Because peer competence reliably follows from security, it is advisable to embed self-regulation training within attachment-supportive care, such as structured EF games and predictable classroom rules and expectations. These practices can provide meaningful gains in compliance and classroom behavior, especially for anger-prone, context-sensitive children. Finally, treat the classroom as a secondary secure base: strengthen teacher sensitivity, provide warm structure, and coach positive negotiation with adults; these practices are linked to higher peer preference and are especially valuable for children navigating family transitions.

6. Conclusion

This review examined how divorce-related family processes, caregiving arrangements and the interparental climate, shape early attachment security, and how attachment security relates to peer relations at school entry. Across studies of parental divorce, the common thread is process, not legal status. Attachment security emphasizes predictability and coordination of caregiving, and how adults handle conflict. In infancy, poorly coordinated arrangements (e.g., frequent overnights without stable routines) are associated with lower security; across family types, hostile couple dynamics undermine security while warm, engaged interactions support it. After separation, ongoing conflict heightens children’s fears of being left and erodes a sense of caregiver availability. Security then shows a reliable link to peer competence, plausibly through self-regulation, and teacher relationships can extend secure-base support in classrooms.

Importantly, a two-setting approach should be adopted. Early years should emphasize predictable routines and coordinated co-parenting. In divorced families, caregivers should reduce conflict and provide clear reassurance and follow-through. Furthermore, in intact/stepfamilies, interventions should pair couple work with parenting support. In schools, teachers should strengthen their sensitivity, warm structure, and coach constructive negotiation, while building self-regulation with structured EF activities and calm-down routines.

References

- [1] Frosch, C. A., Mangelsdorf, S. C., & McHale, J. L. (2000). Marital behavior and the security of preschooler–parent attachment relationships. *Journal of Family Psychology*, 14(1), 144–161.
- [2] Groh, A. M., Fearon, R. P., Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., Steele, R. D., & Roisman, G. I. (2014). The significance of attachment security for children’s social competence with peers: A meta-analytic study. *Attachment & Human Development*, 16(2), 103–136.
- [3] O’Hara, K. L., Rhodes, C. A., Wolchik, S. A., Sandler, I. N., & Tein, J.-Y. (2021). Longitudinal effects of post-divorce interparental conflict on children’s mental health through fear of abandonment: Does parenting quality play a buffering role? *Child Development*, 92(4), 1476–1493.
- [4] Tornello, S. L., Emery, R., Rowen, J., Potter, D., Ocker, B., & Xu, Y. (2013). Overnight custody arrangements, attachment, and adjustment among very young children. *Journal of Marriage and Family*, 75(4), 871–885.

- [5] Prino, L. E., Longobardi, C., Fabris, M. A., & Settanni, M. (2023). Attachment behaviors toward teachers and social preference in preschool children. *Early Education and Development*, 34(4), 806–822.
- [6] Spilt, J. L., & Koomen, H. M. Y. (2022). Three decades of research on individual teacher–child relationships: A chronological review of prominent attachment-based themes. *Frontiers in Education*, 7, 920985.
- [7] Heikamp, T., Trommsdorff, G., Druey, M. D., Hübner, R., & von Suchodoletz, A. (2013). Kindergarten children's attachment security, inhibitory control, and internalization of rules of conduct. *Frontiers in Psychology*, 4, 133.
- [8] Bendel-Stenzel, L. C., An, D., & Kochanska, G. (2022). Infants' attachment security and children's self-regulation within and outside the parent–child relationship at kindergarten age: Distinct paths for children varying in anger proneness. *Journal of Experimental Child Psychology*, 221, 105433.
- [9] Bowlby, J. (1969). *Attachment and loss*. Vol. 1: Attachment. Basic Books.
- [10] Coleman, J., Cowan, P. A., & Pape Cowan, C. (2022). Attachment security, divorce, parental estrangement, and reconciliation. *Journal of Social and Personal Relationships*, 39(3), 778–795.