



Transmission of Attachment at Preschool-Age: The Mediating Role of Mother-Child Conversation Styles

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Abstract

Objective: Parents initiate conversations with their preschoolers about everyday experiences in which they share thoughts, feelings, and intentions. The ability to efficiently treat attachment relevant-information and organize attachment behavior beyond infancy is likely to be scaffolded by the parent in the context of parent-child discourse. The objective of this study was to examine mother-child conversation styles as a function of child attachment and test the the role of mother-child conversation as a mediator in the transmission of attachment from mother to child.

Methods: The sample included 111 dyads of mothers and their preschool children (3-5 years of age). Child attachment was assessed using the Preschool Attachment Coding System. Mothers' attachment state of mind was coded using the Adult Attachment Projective. Mother-child conversation styles were assessed during a 10-minute snack time.

Results: Analyses indicated a significant correspondence between maternal and child attachment classifications. Moreover, autonomous mothers and secure children were more inclined to integrate affective information during verbal exchanges, while dyads involved in insecure avoidant, ambivalent, or disorganized relationships were more inclined to minimize, exaggerate, or be overwhelmed with affective information. Finally, children's ability to integrate affective information mediated the link between mother and child attachment security.

Conclusion: Overall, results emphasize the importance of the quality of mother-child conversation for the development of internal working models of child attachment during the preschool period. In addition, results are also informative for the development of attachment-based intervention for parents and their preschoolers.

Keywords: Child attac several the is the p

Attachment theorists [3,13] have suggested that at preschool age, parents' contribution to the ongoing development of attachment internal working models goes beyond early sensitive caregiving. Parents initiate conversations with their preschoolers about everyday the preschool age

According to Bowlby et al. [13], parents who engage in free-f owing conversation in which they express feelings and allow discussion of em

reschool years with the emergence of language and perspective taking [5,6]. However, relatively few studies have examined child attachment at the preschool period [7-11], an age when mother-child interactions increasingly rely on verbal communication, with children becoming capable of self-reflection [12] and increasingly responsible for the attachment relationship they develop toward their caregiver [13].

otional experiences, foster the development and continuity of

attachment security. In allowing free access to the variety of emotions and thoughts the child is experiencing, the parent serves as a secure base from which the child can explore feelings and thoughts [4]. Not only does this communication style encourage child sharing of emotional experiences and self-reflection, but it also helps develop more sophisticated means of organizing information. As a result, in times of stress, secure children are more likely to coherently organize attachment information and use the caregiver as a way to reduce distress.

To date, few studies have examined the link between parent-child conversation and child attachment. Studies have shown that children involved in more open, balanced, and fluid conversations or emotionally matched dialogues with their mothers during preschool and early school age [2,15,16] were classified as securely attached in infancy. Other studies found that mothers and their secure children used a more elaborative narrative style, more mental state language, and showed greater emotion understanding when discussing emotional and conflictual experiences [17-23].

According to Bowlby et al. [24], when maternal verbal communication is incoherent with the child's experience, whether because mothers contradict, distort, or ignore the child's real experience, the child is left to agree with the parental version and defensively exclude personal information in order to remain coherent with the caregiver and preserve their relationship. Parents who pressure their child to exclude information relevant to the attachment relationship fail to provide the appropriate emotional support or scaffolding that is needed to learn how to process and integrate emotional experience [24,25]. These miscommunication patterns, characterized by feelings of distrust, rejection, anger, or confusion, affect children's capacity to coherently organize attachment information and can lead to the development of insecurity.

Infancy research has found that intrusive, rejecting or unavailable caregivers are more likely to have children with an insecure-avoidant attachment [26]. Mothers who are unavailable to child distress and emotional signals tend to diminish the importance of the attachment relationship, which may lead to child minimization of affective information [27]. It was found that mothers and children classified as

infant's perspective and underlying motives [39,40]. Maternal mind-mindedness during mother-child interaction explained the transmission of attachment security for a small sample of 25 infants [41]. Although extensive research has helped bridge the "transmission gap" in infancy [36, 42-44], less attention has been given to other developmental stages and no studies have looked at mental processes of both mothers and children during conversations to test the transmission hypothesis.

Dyads included in this sample are part of an ongoing longitudinal study that began a when children were 3.5 years old. Although it is theoretically expected, when testing for the intergenerational attachment transmission, that the assessment of adult attachment representations be conducted prior to or at the least concurrent to the child attachment measure, this is unfortunately not the case for this longitudinal design in which adult attachment was administered two years after the preschool child attachment measure. However, because so few studies on the transmission of attachment were conducted at the preschool period [45,46], we value the importance of exploring these links. In addition, these studies were conducted solely with clinically-referred mothers (anxiety disorders) or children (conduct behavior disorder), and none have tested for potential mediating variables. Clearly, the field of mother-child attachment transmission at the preschool period is lacking empirical results. Investigation of parent-child transmission models with an independent variable measured several years after the assessment of the mediator has been done in prior family studies [47] with longitudinal data sets.

Hypotheses

Based on infancy studies, we first expected a correspondence between mother and child attachment patterns: 1) maternal autonomous state of mind and child secure attachment; 2) maternal dismissing state of mind and child avoidant attachment; 3) maternal preoccupied state of mind and child ambivalent attachment; and 4) maternal unresolved state of mind and child disorganized attachment. We also hypothesized that secure children and autonomous mothers would make more coherent and integrative statements than others. In contrast, insecure disorganized children and mothers with an unresolved attachment state of mind would be involved in conversations showing the least coherency. In addition, we hypothesized that avoidant children and dismissing mothers would make more statements that minimized affective information than other dyads, while ambivalent children and preoccupied mothers would make more statements that exaggerated affective information. As for disorganized children and unresolved mothers, we expected them to make more uncontained verbal statements, including acting out behaviors. Finally, we expected that mother-child integration during conversation to mediate the potential correspondence between maternal and attachment security.

Method

Participants

Participants in this study included 114 mother-child dyads (53 girls and 61 boys). These dyads were part of a larger sample of 157 3.5-year-olds recruited through preschools of diverse socioeconomic backgrounds. Data was collected during a lab visit occurring at initial recruitment (Time 1; child mean age = 44 months, SD = 4.3 months, range 34 to 56 months), with the exception of the Adult Attachment

Projective (AAP) mothers' attachment state of mind which was administered two years later (Time 2; child mean age = 67 months, SD = 4.2 months, range 59 to 77 months). All mother-child dyads with AAP and mother-child interaction data were included in this study. Attrition between Time 1 and 2 occurred because: 1) mothers could not be reached (n = 20); 2) refused to participate (n = 6); 3) did not show up to the visit (n = 11); and 4) mother-child interaction could not be coded due to technical problems (n = 6).

Procedure and Instruments

The laboratory protocol at Time 1 was as follows: a) greeting of the dyad followed by mother-child free play session (10 min); b) separation-reunion procedure (20 min); c) child completes the Peabody Picture Vocabulary (approximately 30 min.) while mother completes questionnaires in another room; d) snacktime (10 min). During the snacktime, juice, coffee and cookies were served to the dyad, and toys and magazines were available in the room. At Time 2, dyads were invited for a lab visit during which mothers completed the AAP (30min).

Attachment protocol and classification

The well-validated separation-reunion procedure described by Cassidy and Marvin et al. [48] for preschool-aged children was used in this study. It consists of five episodes lasting 5 minutes each: 1) mother and child together; 2) mother leaves; separation between mother and child; 3) reunion: mother comes back in the room; 4) second separation; 5) second reunion. During both separations, the child was left

recognized experts (E. Moss and R. Marvin) and achieved reliability with them on a separate sample of tapes. Difficult cases in our sample were resolved by reviewing the tapes until consensus was reached. Coders were blind to participants' scores on other study variables.

Because the distribution of the six attachment classification groups revealed that only 3 children were classified as insecure-controlling, these children were excluded from statistical analyses. Although some studies have combined insecure-controlling and insecure-disorganized children into one group, recent studies show different profiles for these children as well as for their mothers [11,50]. Therefore, analyses were performed on a total of 111 mother-child dyads.

Adult attachment projective

The AAP [51-53] assesses attachment in adults based on the analysis of their responses to a set of attachment-related drawings. During the procedure, the individual is presented with eight pictures and asked to make up a story for each one. The AAP begins with a neutral, warm-up picture of children playing ball, followed by seven attachment scenes depicting potential attachment dyads (e.g., a child and a woman sit facing each other at opposite ends of the child's bed) or individuals alone (e.g., a man stands by a gravesite).

Four attachment classifications, paralleling those of the AAI (Adult Attachment Interview), are assigned on the basis of content, discourse and defensive processing codes. Autonomous or secure (F) individuals use few defensive processes and have moderate-to-high coherency. Their

M: Maybe you were shy because it is the first time you come here.

ages from those who did not come back, did not reveal any significant differences.

Preliminary analyses

Analyses were undertaken to identify potential covariates to include in analyses predicting child attachment security. Chi-square analyses revealed that child gender was not associated with child attachment security, $\chi^2(3, N = 111) = .59$, ns. One-way ANOVA analyses showed that attachment groups did not significantly differ with respect to child age, child IQ, maternal education, or family income, F s between .19 and 2.21. Results of one-way ANOVAs also showed that child gender was not significantly associated with mother or child discursive style and dyadic coherence, F s between .06 and 3.06. Neither child age or family income was significantly correlated with mother or child

discursive style or dyadic coherence, r s between .01 and .18. Child IQ and maternal education were significantly correlated with child or mother discursive style respectively and dyadic coherence, r s between .23 and .31. Subsequently, child IQ was used as a covariate in analyses involving child discursive style and maternal education was used as a covariate in analyses involving maternal discursive style.

Significant correlations were found between mother and child discursive styles (see Table 2). Children's discursive style were moderately correlated to their mother's discursive style, with r s ranging from .28 to .50. Also, significant correlations were found between dyadic coherence and mother-child discursive styles, with r s ranging from .38 to -.54. Given that scales were only moderately correlated, they were kept separate in subsequent analyses.

Variables	1	2	3	4	5	6	7	8
1. Child integration	---							
2. Mother integration	.34**	---						

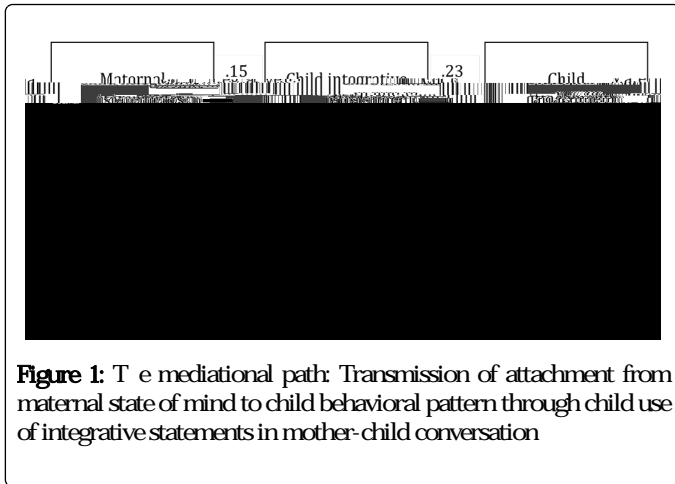
Attachment and mother-child discursive style

Four one-way ANCOVA analyses were performed to examine differences in child or maternal discursive style as a function of attachment classification. A series of contrasts in line with our a-priori hypotheses were included in each analyses: 1) Dyadic coherence and Integration: secure group (B) or autonomous group (F) versus others; disorganized (D) group or Unresolved group (U) versus others; 2) Minimization: insecure-avoidant (A) or Dismissing group (Ds) versus others; 3) Exaggeration: insecure-ambivalent (C) or Preoccupied group versus others; 4) Chaotic expression: insecure-disorganized (D) or Unresolved (U) group versus others. In addition to contrasts, posthoc analyses (Tuckey simple comparisons) were conducted to examine other possible group differences not based on a-priori hypotheses.

Child attachment and mother-child discursive style

All of the ANCOVAs performed on dyadic coherence as well as on child and mother discursive styles, except for child minimization of affective information, revealed significant attachment group differences. Means, standard deviations, and statistical values are

We tested with the Goodman (I) test [63] if the effect of maternal attachment state of mind had significantly decreased from the first to the third regression. This test is used with logistic regressions when the mediator is continuous [63]. Results showed a significant decrease in the B weights for maternal attachment from the first regression to the third, $z = 2.20$, $p < .05$, supporting the mediation model (Figure 1). Because maternal attachment remained a significant predictor, we conclude that child integration statements are a partial mediator (see Figure 1 for the mediated path).



Discussion

Mother-child conversation offers a unique window into children's organization of emotions and thoughts, thereby providing a valuable area to further understanding of attachment relationships during childhood. Following Main et al. [2] ground breaking work on attachment at the level of representation, we examined mother-child processing of affective information at the conversational level and found that each child attachment group could be characterized by a

mother and child attachment security. These results support the idea that mother-child day-to-day conversations are an important context for processing attachment related-information, and thereby influencing children's development or maintenance of secure attachment behavior [3]. Mother-child conversational exchanges contribute to the development of an internalized secure base enabling children to extend their primary exploration of the physical environment to a more abstract exploration of their own thoughts and emotions, as well as those of others.

Clinical implications

Implications of this study results are considerable for intervention. In identifying parental and child behaviors that are associated with child security and insecurity, results of this study bring forth potential intervention strategies that may enhance children's secure attachment behaviors and social adaptation. Interventions with a focus on mother-child conversations, reinforcing maternal use of integrative statements, such as supporting the child's exploration of thoughts and emotions, may foster child integration of affective information and orient him or her on a pathway of security. This adds to the recent studies claiming a focus on the reinforcement of maternal sensitive behavior for the development of secure attachment relationships [72]. Considering the results of this study, intervention efforts that would solely focus on the attachment figure (e.g., traditional individual therapy with mother or social support services provided to the mother) or that would only consider the child's personal input, would be insufficient to enhance attachment security. Child attachment at the preschool age is the result of a goal-corrected partnership, in which both the mother's and child's plans, actions, and intentions need to be taken into consideration to promote an open communication pattern in which the needs of both partners can be met [1].

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