



The Relation Among Attachment Security, Emotional Communication, Theory of Mind Understanding, and Language Development in the Late Preschool Years

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ABSTRACT

The study examined the relations among children's attachment security, emotional communication, theory of mind understanding, and language development in the late preschool years, when these aspects of social cognition are rapidly expanding and influencing children's ability to interact and form meaningful relationships. Twenty children and their parents participated in a Strange Situation, assessed using Crittenden's Preschool Assessment of Attachment (PAA), and in conversations about events when the children were happy, sad, scared, and angry, assessed using Koren-Karie and colleagues' Autobiographical Emotional Events Dialogue (AEED). Children's theory of mind understanding was assessed in Wellman and Liu's tasks tracking the mastery of diverse desires, diverse beliefs, knowledge access, contents false belief, and real vs. apparent emotion. Children's language development was assessed on the Peabody Picture Vocabulary Test (PPVT-4). Associations among the measures indicate children's attachment security was related to their AEED score; although all the parent-child dyads were emotionally matched, those with reciprocal dialogue conversation patterns about past events were more likely to be securely attached and those with challenging/demanding conversation patterns were more likely to be insecurely attached. Children's theory of mind understanding was predicted by the children's age, with 70% of the children showing the exact pattern of Wellman and Liu's sequential development through the tasks.

BACKGROUND

Attachment security, emotional communication, theory of mind understanding, and language development each represent an important component in the development of preschool children's social cognition, which allows them to interact and form meaningful relationships with others. Previous studies have often examined two of these components to investigate whether there is an association between them, but few studies have examined all four factors to view their interconnecting relation. Although social cognition goes through a developmental process beginning in early infancy and continuing throughout life, major milestones occur between four and five years of age. The present study examined the relation among children's attachment security, emotional communication, theory of mind understanding, and language development during this critical age range.



METHOD

Participants

Twenty child-parent dyads participated (children's age: M 4.24 years, SD .50 years; equal males and females).

Measures

- Children's attachment security was assessed from a Strange Situation procedure using Crittenden's (1992) Preschool Assessment of Attachment (PAA).
- Parent-child emotional communication was assessed using Koren-Karie and colleagues' (2003) Autobiographical Emotional Events Dialogue (AEED) in which the dyad was asked to recall four events where the child was happy, sad, scared, or angry and to jointly discuss each event. The dyads then were categorized into one of three emotionally matched categories: dialogue and reciprocity, concise and brief, or challenging and demanding; or one of three emotionally unmatched categories: exaggerated, flat, or inconsistent.
- Children's theory of mind was assessed using Wellman and Liu's (2004) five tasks tracking the sequential mastery of theory of mind. The tasks measured children's understanding of diverse desires, diverse beliefs, knowledge access, contents false belief, and real vs. apparent emotion.
- Children's language development was assessed using the Peabody Picture Vocabulary Test (PPVT-4) (Dunn & Dunn, 2007).

RESULTS

Table 1 shows the correlations conducted among the children's attachment security, AEED scores, theory of mind scores, PPVT-4 scores, and the demographics (children's age and sex, parents' education). Significant correlations were found between attachment security and AEED scores and between theory of mind development and children's age.

The AEED scores indicated that all the parent-child dyads were emotionally matched, but those with dialogue and reciprocity conversation patterns were more likely to be securely attached and those with challenging and demanding conversation patterns were more likely to be insecurely attached.

As the children aged, more theory of mind tasks were mastered. Table 2 shows the patterns of the children's mastery of the theory of mind tasks. Seventy percent of the children fit the Wellman and Liu scale exactly; for the remaining children, only one of the tasks was out of the predicted order. All the children were at or above their age level for receptive language.

Table 1. Correlations Among the Children's Attachment Security, AEED Scores, Theory of Mind Scores, PPVT-4 Scores, and Demographics (Children's Age, Sex; Parents' Education).

| | Attachment | AEED | Theory of Mind | PPVT-4 | Age | Sex |
|------------------|------------|-------|----------------|--------|-------|------|
| Attachment | | | | | | |
| AEED | .693** | | | | | |
| Theory of Mind | -.281 | -.023 | | | | |
| PPVT-4 | .001 | -.105 | .305 | | | |
| Age | .149 | .149 | .529* | .311 | | |
| Sex | .447 | .219 | -.413 | .089 | -.023 | |
| Parent Education | -.125 | -.076 | .367 | .266 | -.019 | .101 |

Note. * $p < .05$; ** $p < .01$.



Table 2. Children's Pattern of Pass/Fail Scores on the Theory of Mind Tasks.

| Diverse Desires | Diverse Beliefs | Knowledge Access | Contents False Belief | Real-Apparent Emotion | Number of Children Showing the Pattern |
|-----------------|-----------------|------------------|-----------------------|-----------------------|--|
| - | - | - | - | - | 2 |
| + | - | - | - | - | 3 |
| + | + | - | - | - | 4 |
| + | + | + | - | - | 0 |
| + | + | + | + | - | 3 |
| + | + | + | + | + | 2 |
| - | + | - | - | - | 1 |
| - | + | + | - | - | 2 |
| + | - | + | - | - | 1 |
| + | - | + | + | - | 2 |

Note. A minus sign means the child failed the task; a plus sign means the child passed the task.

CONCLUSIONS

The findings indicate that securely attached children tend to engage in open and reciprocal dialogue with their parents about emotional events, whereas insecurely attached children tend to have parents who are more demanding in such discussions and are less sensitive to their children's pace, wishes, and comfort. Theory of mind understanding showed the predictable development with age. However, in this sample neither theory of mind development or receptive language ability was associated with the other social cognitive measures used.

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