

## Mother-Child Attachment Relationships in Fragile Families

Historically, most of the literature on mother-child attachment is based on middle-class white samples. More recently, there has also been a fairly large amount of international research in this area, as well as some important longitudinal work with low-income samples in the US. However, no studies have examined the characteristics of mother-child attachment across different types of family structures – particularly among cohabiting parents. Given that this is a new direction in the attachment literature, a set of exploratory analyses have been conducted to explore the range of attachment patterns observed in a large sample of high-risk families.

Data were drawn from the Fragile Families and Child Well-Being study. The sample is nationally representative of non-marital births in cities over 100,000. Attachment data was collected during the three year home interview with 2271 mothers using a Toddler Attachment Q-Sort. The q-sort consisted of attachment-related items from Everett Waters' Attachment Q-Set (1987). As part of the q-sort methodology, the items were physically sorted into piles. The sort was a two stage process. In the first stage, mothers were asked to sort the cards into 3 piles: one for characteristics that particularly described the child, one for characteristics that were not like the child, and the third for characteristics that weren't particularly extreme. In the second stage, the two extreme piles were divided into more or less salient items (1 and 2) and more or less negatively salient (4 and 5). The middle pile (3) was not subdivided. The item scores were entered into the data based on the pile that they were in after the second sort (item scores range from 1-5). For each of the 39 items, the sample size ranged from 2243-2267.

In the first set of analyses, a factor analysis was conducted on the original 39-items in order to identify the underlying factors that made up the attachment construct. The result yielded 8 factors that together accounted for 49% of the variance. These factors were labeled as “comfortably cuddly”, “cooperative”, “enjoys company”, “independent”, “attention-seeking”, “upset by separation”, “avoids others/does not socialize”, and “demanding”. Each of the cases was also classified into A, B, and C attachment categories (Secure, Avoidant, Resistant) based on comparing score profiles to prototypical descriptions of the attachment categories (Bimler & Kirkland, 2005). According to this classification, 75.7% of the sample was rated as secure, 22.1% as resistant and only 2.1% were considered avoidant. Girls were more likely to be rated as secure than boys,  $\chi^2(4, N=2268) = 28.56, p < .01$ . Attachment classifications were unrelated to parents’ marital status, but were associated with living arrangements. Children who lived with both parents were more likely to be rated as securely attached than children who did not live with their father,  $\chi^2(6, N=2268) = 15.62, p < .05$ .

In the next step, the 8 factors that comprised children’s attachment profile were entered into a cluster analysis in order to identify clusters of children who shared similar patterns of attachment behaviors. Two unique clusters of children were identified. The first cluster consisted of children who had higher scores on “comfortably cuddly”, “cooperative” and “independent”, each of which tend to describe a child with a secure attachment. The second cluster consisted of children who had lower scores in general, but had consistently higher scores on “attention seeking”, “upset by separation”, and “demanding”, factors traditionally associated with insecure-resistant attachment. Two factors, “enjoys company” and “avoids others” did not help to distinguish between the

clusters. A chi-square analysis confirmed the relationship between cluster membership and attachment classification: the first cluster consisted primarily of securely attached children, whereas the second cluster consisted of all of the children with resistant attachment as well as some who were rated as securely attached,  $\chi^2(2, N=2268) = 759.66, p < .001$ .

Additional analyses are planned to further describe the range of attachment patterns in this sample. Factor Mixture Modeling (FMM) will be used to more thoroughly explore the sources of population heterogeneity in attachment profiles. Using a model based approach has the advantage of available goodness of fit indices to help evaluate the most appropriate number of factors and classes to extract in the data (Lubke & Muthen, 2005). In addition, a set of covariates will be used to further explain the characteristics of mothers and children who represent each different attachment profile. Covariates will include variables related to family structure, demographics, and maternal psychopathology.

The results of this paper will be important for understanding attachment relationships across a wide range of families. In addition, by using continuous data to examine attachment profiles, we move away from the traditional approach of categorical classification of attachment styles, instead using a more fluid approach to thinking about attachment. Since the development of a strong parent-child bond during the early years is an important developmental goal, it is also important for researchers to more fully understand the different ways that these relationships emerge and develop for different kinds of children and families.

## References

- Bimler, D., & Kirkland, J. (2005). *Fragile families child neglect and child care: Q-sort data*. Unpublished report prepared for Columbia University.
- Lubke, G. H., & Muthen, B. (2005). Investigating population heterogeneity with factor mixture models. *Psychological Methods, 10*, 21-39.