Title: Sustained Child Problem Behaviors Impact Quality of Mother-Child Relationships in Fragile X Syndrome

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Introduction: Parenting a child with a neurodevelopmental disorder, such as fragile X syndrome (FXS), creates challenges to the quality of the mother-child relationship, specifically mother-child closeness. Mother-child closeness, as measured by the Positive Affect Index (PAI; Bengtson & Black, 1973) is the level of affection, trust, fairness, understanding, and respect mothers feel toward their children with disabilities, as well as the level of reciprocated closeness the mother perceives from the child (Abbeduto et al., 2004). Previous research using the PAI suggests that child behavior problems are the strongest predictor of mother-child closeness in adolescents with autism, FXS, or Down syndrome (Abbeduto et al., 2004). Lewis et al. (2006) found that mothers of adolescent sons with FXS and co-morbid autism indicated reduced levels of mother-child closeness compared to mothers whose adolescent sons had FXS without autism. However, little is known about mother-child closeness in childhood and the impact of ongoing behavioral problems on mother-child closeness. The aim of this study was to determine the predictive abilities of early autism symptomology and problem behaviors on later mother-child closeness in children with FXS and FXS and co-morbid autism. A secondary aim was to determine which, if any, specific early problem behaviors were predictive of later mother-child closeness.

Method: 55 mothers of children with FXS were visited twice. At Time 1 children were on average 45.98 months-old (+/- 8.94), and at Time 2 children were on average 109.43 months-old (+/- 9.13). Children were assessed for problem behaviors using the Childhood Behavior Checklist and for autism symptomology using the Childhood Autism Rating Scale at Time 1 and Time 2. During the Time 2 visit, the mothers provided a self-rating of mother-child closeness using the Bengtson PAI. Cases with missing data were removed from the analyses, yielding a total sample of n = 51.

Results: Early problem behaviors were significantly correlated with later problem behaviors, \( r = 0.48, p < 0.01 \). Problem behaviors were significantly negatively correlated with mother-child closeness, \( r = -0.47, p < 0.01 \). A multivariate regression was performed and determined that early child problem behaviors, but not early autism symptomology, were predictive of later mother-child closeness, \( t(48) = -3.61, p < 0.01 \). A second multivariate regression demonstrated that externalizing behaviors, but not internalizing behaviors, were predictive of later mother-child closeness \( t(48) = -2.19, p < 0.05 \). To determine which specific externalizing behaviors were predictive of mother-child closeness, a third multivariate regression was performed. Attention-seeking problem behaviors but not aggressive behaviors were predictive, \( t(48) = -3.25, p < 0.01 \) and \( t(48) = -1.24, p > 0.05 \), respectively.

Discussion: Mothers of children with higher levels of problem behaviors reported lower levels of mother-child closeness in a sample of boys and girls with FXS with and without co-morbid autism. Specifically, attention-seeking, externalizing behaviors predicted mother-child closeness. This suggests that ongoing problem behaviors can impact the quality of the relationship between mother and child. Interestingly, autism symptoms were not predictive of mother-child closeness, despite previous literature implicating a role of autism. Future research should investigate interventions to increase mother-child closeness in families with children who have high levels of behavior problems.

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References/Citations: