Frontal Alpha Asymmetry (FAA) is a brain measure which has been used widely in various studies regarding psychopathology as a measure of trait motivation. For example, depression has been associated with reduced FAA, which indicates a reduction in approach motivation and an increase in withdrawal motivation. FAA is based on the frontal electroencephalography (EEG) activity of the brain recorded during the resting state. This study focuses on changes in the FAA in infants over time and its relation to developmental changes. In the study, 16 mother-infant dyads were assessed over a one-year follow-up, with brain recordings taken by EEG when the infant was both 12 months old and 24 months old. The Bayley Developmental Scale was used to assess changes in motor, cognitive, and linguistic development from 12 months to 24 months of age. Changes within developmental domains and changes in FAA were calculated with a within-subjects paired sample t-test. Relationships between FAA and developmental measures were then calculated with a bivariate correlation. Among the three developmental measures, motor development at 24 months had the strongest correlation with 12 month FAA scores with a value of $r = .437$. This suggests possible developmental specificity, whereby higher trait motivation at 12 months may predict greater motor development at 24 months, but not cognitive or linguistic development.

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