

Childhood Experiences and Parental Bonding modulates the late positive potential neural index of emotional reactivity

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Abstract

Young adulthood is a high-risk period for Major Depressive Disorder (MDD), often linked to reduced neural responses to positive stimuli, as measured by Late Positive Potentials (LPP). This study examines the connection between childhood experiences, parental bonding, and emotional sensitivity in adulthood. Participants (n=65), without a current MDD, completed assessments on depressive symptoms (BDI-II), adverse childhood experiences (ACE), and parental bonding (PBI). Participants viewed positive, negative, and neutral images while EEG data were collected to measure LPP. Key findings showed that higher depressive symptoms (BDI-II) were associated with increased LPP to negative and decreased LPP to positive images. Higher ACE scores correlated with lower LPP to positive images. Additionally, greater parental care (PBI-Care subscale) was linked to increased LPP to positive and decreased LPP to negative images. The PBI-Overprotection subscale was not a significant factor. The study highlights how childhood experiences and parental bonding shape emotional processing in adulthood.