Examining Hormone Variability as a Predictor of Interpersonal Relationship Conflict in Peripubertal Girls

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Hormone Variability in Peripubertal Females: How Reproductive Hormone Fluctuations are Predictors of Interpersonal Conflict

At the start of the pubertal transition, girls become three times more likely than men to develop depression (Angold, 1993; SAMHSA, 2017). Women are also more susceptible to depression postpartum and during menopause. During each of these reproductive stages, women experience increased fluctuation in hormones, like testosterone and estrone. This flux can lead to increases in negative mood symptoms. Reproductive hormones are also responsible for modulating neural networks involved in social processing, so hormone variability can affect social behavior. The objective of this study was to see if hormone variability could predict interpersonal conflict in peripubertal girls. The study used the standard deviations of weekly hormone samples along with self-reported Friendship Stress and Child Chronic Strain questionnaire scores to generate a linear regression. The data demonstrated a significant correlation between friendship stress and hormone variability of estrone and testosterone. Accordingly, higher standard deviations of weekly hormone levels predicted a higher risk of friendship stress. This suggests hormone variability is a predictor of interpersonal conflict in girls during puberty.