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Title of Presentation: Puberty, Stress, Hormones, and Depression Symptoms

Abstract

Many physical and psychological changes characterize puberty. The drastic increase of gonadal hormone release (such as testosterone and estradiol) guides the development and has a lasting effect on the brain and behavior. During this time, exacerbation of stress via adversity and trauma is hypothesized to be a risk factor for major depression. The body responds to stress with cortisol release. Research suggests that pubertal stressors cause maladaptive neuronal organization. In other words, increased cortisol release during puberty alters brain development, and this potentiates outcomes such as depression. Additionally, people with depression have increased cortisol secretion compared to healthy counterparts. This honors thesis will investigate stress-related cortisol secretion. It is hypothesized that pubertal stress is correlated with increased cortisol secretion in response to stress and increased depression symptoms in adulthood. This study will examine cortisol concentration in hair, and saliva samples from undergraduate participants recruited from Simon Fraser University.