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## Autonomic Nervous System response to interpersonal exclusion in Borderline Personality Disorder

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## ***Autonomic Nervous System response to interpersonal exclusion in Borderline Personality Disorder***

College of Sciences and Health Professions

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### **Abstract**

Intense emotional reactions to interpersonal rejection reflect the core of Borderline Personality Disorder (BPD). These reactions supported by the autonomic nervous system (ANS), which has been linked to neural regions that undergird emotional experience and regulation that are affected among individuals with BPD. Despite such links, relatively few studies have examined ANS functioning among BPD populations. The few studies that have primarily focused on the independent activity of the two sympathetic (SNS) and parasympathetic (PNS) ANS branches during resting states or in response to emotion evocative films, rather than to interpersonal rejection. The present study overcomes the above noted gaps in the literature by examining the combined effects of SNS and PNS activity in response to interpersonal rejection on BPD symptoms. It was hypothesized that strong increase in SNS activity and strong decrease in PNS activity would be associated with elevated BPD symptoms.

Twenty-eight participants (68% female,  $M_{age} = 29.64$ ) completed a measure of BPD and a protocol during which SNS and PNS activity were measured over a 3-minute resting period and in response to an interpersonal exclusion task (Cyberball). Consistent with expectation, reduced PNS dominance during the interpersonal exclusion task was robustly predicted elevated BPD symptoms. Clinical implications are discussed.