Abstract

Experimental research has revealed common activation in various brain regions during experiences of physical pain and social pain (Eisenberger, Lieberman, & Williams, 2003; DeCharms et al., 2005; Eisenberger, Gable & Lieberman, 2007; Lieberman & Eisenberger, 2006). Scientists propose that due to the adaptive nature of mammalian social connections, the social attachment system has evolved to overlap with the physical pain processing system in order to increase chances of mammalian survival (Eisenberger et al., 2003). Although research suggests social relationships are essential to our wellbeing (MacDonald & Leary, 2005), negative social interactions are often considered common and unavoidable aspects of the human experience (DeWall et al., 2010). The current study examined differences in physiological arousal and subsequent verbal descriptions of two forms of stress including social stress (i.e., you don't get invited to something or you get left out of something) and academic stress (i.e., technological problems cause you to lose an assignment). Participants completed two-semi structured interviews including the Social Competence Interview and the Academic Competence Interview. Throughout the baselines and stress tasks, heart rate and skin conductance were recorded to assess physiological reactivity. Additionally, the frequency and intensity of language used to express pain and negative affect while describing both forms of stress were calculated. The three hypotheses of the study are: 1) participants will exhibit heightened physiological stress responses (i.e., increases in skin conductance and heart rate) when discussing a social stressor as compared to an academic stressor; 2) participants will more frequently use pain words and the pain words that they use will be rated as more severe when discussing the social as compared to the academic stressor;

and 3) the greater reactivity to the social stressor will be present in both males and females, although more pronounced in females. In addition, males are expected to display higher reactivity (i.e., physiological reactivity and use of more and more severe pain words) to academic stress than females due to the higher achievement goals.

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