# It’s Not all the Parent’s Fault: Delinquency in Children Now Linked to Biology

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How do sweet children turn into delinquents seemingly right before our eyes? A unique study appearing in the June issue of *Psychological Science*, a journal of the Association for Psychological Science, shows that, in children, a highly reactive autonomic nervous system, which regulates our cardiovascular, digestive and respiratory functions, paired with a stressful family environment leads to increased instances of maladaptive personality change.

Rutgers University psychologist, Daniel Hart, and colleagues Nancy Eisenberg and Carlos Valiente of Arizona State University, used a Skin Conductance Response (SCR) test to assess 138 elementary school aged children. SCR is a frequently used as an appraisal of autonomic arousal in humans and, specifically, measures the amount of sweat on the participant’s palm when exposed to stressful stimuli.

In this case, the children watched a video of a dolphin swimming in the ocean so that the researchers could collect their baseline stress response. Next, they watched a second, more stressful, film involving a lamp causing a fire in a girl’s room, which elicited their normal autonomic arousal patterns under stress.

The results show that the combination of high SCR and high family risk predicted substantial increases in personality change and behavior problems. The researchers observed the children four separate times over the course of six years, making this the first study to show that the interaction of family adversity with a biological characteristic is associated with longitudinally measured change in childhood personality.