HUMAN DEVELOPMENT AND FAMILY STUDIES

DISSERTATION DEFENSE FOR

DEIRDRE KATZ

TITLE: ADOLESCENT STRESS REACTIVITY AND RECOVERY: EXAMINING THE RELATIONSHIPS BETWEEN EMOTION REGULATION AND THE STRESS RESPONSE WITH A SCHOOL-BASED GROUP PUBLIC SPEAKING TASK

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Areas of Specialization: Prevention Science and Individual Development
ABSTRACT

This dissertation examines the associations between physiological responses to stress and emotion regulation strategies in a group of adolescents. The primary aim of this study is to examine affective chronometry, the temporal dynamics of emotion regulation, in a group of adolescents by exploring the relationships between their self-reported emotion regulation strategies and their hypothalamic-pituitary-axis (HPA) response to a social-evaluative stressor. The second aim of this study is to explore the feasibility and effectiveness of using a group version of the Trier Social Stress Test (GPST-A), a social-evaluative stressor, in a school-based setting. Salivary cortisol was measured in response to a social-evaluative stressor, the GPST-A, at 6 time points. Affective chronometry was examined by comparing participants’ salivary cortisol concentration and self-reported measures of 3 emotion regulation strategies – suppression, reappraisal and rumination - before and after the social-evaluative stressor. Results from a discontinuous multilevel model indicate that the protocol was feasible in the school context and effective at eliciting a typical stress response. Results also indicate that rumination, but not suppression or reappraisal, was associated with the reactivity phase of the stress response. Specifically, trait rumination predicts a less steep cortisol reactivity slope and state rumination predicts a steeper cortisol reactivity slope. Suppression and reappraisal had no effect on participants’ cortisol response profiles.

The present study provides a better understanding of affective chronometry in a group of adolescents through a unique analytic approach. These findings suggest that it may be efficacious for researchers to utilize a discontinuous multilevel model with landmark registration to examine affective chronometry.