

Physiological and Affective Correlates of Visual and Verbal Rumination in Adolescence

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The proposed research examines physiological and affective correlates of visual and verbal rumination in adolescence. Rumination, or repeatedly dwelling on negative emotion, is a prominent risk factor for depression. To date, rumination has nearly exclusively been examined as verbal thought (i.e., dwelling in the form of words), despite evidence that some individuals dwell on negative emotion in a visual way (i.e., dwelling in the form of mental images; Lawrence, Haigh, Siegle, & Schwartz-Mette, under review). This is concerning as compared with verbal thought, visual thought is more physiologically arousing (Vrana, Cuthbert, & Lang, 1986), emotionally stimulating (Holmes & Mathews, 2010), and realistic (Mathews, Ridgeway, & Holmes, 2013). Thus, ruminating visually may be even more impairing than ruminating in verbal form. The proposed research evaluates physiological (Aim 1) and affective (Aim 2) response to visual and verbal rumination in adolescence. Associations between visual/verbal styles of rumination and severity of depressive symptoms are also examined (Aim 3). Using a multi-method experimental design, adolescents (N = 80; age range: 13-17, 50% female) complete a laboratory session consisting of questionnaire completion and a visual/verbal rumination/distraction induction. Physiological data and affect ratings will be obtained throughout. Multilevel models will be tested to identify how physiological and affective response may differ between visual and verbal rumination, and how visual/verbal rumination may differential relate to depression. Gender differences will be examined in the context of each aim. Multi- method evaluation of visual and verbal rumination has potential to enrich our understanding of rumination in adolescence. What is more, the proposed research may ultimately aid in identifying prevention and treatment targets, improving outcomes for depressed adolescents.

Keywords: adolescent depression, rumination, heart rate variability, affective processes, mental imagery