ARTICLE IN PRESS

Journal of Experimental Child Psychology xxx (2015) xxx-xxx



The effects of distraction and reappraisal on children's parasympathetic regulation of sadness and fear

Elizabeth L. Davis^{a,*}, Laura E. Quiñones-Camacho^a, Kristin A. Buss^b

^a University of California, Riverside, Riverside, CA 92521, USA
^b The Pennsylvania State University, University Park, PA 16801, USA

ARTICLE INFO

Article history: Available online xxxx

Keywords: Emotion regulation strategies Parasympathetic regulation RSA Distraction Reappraisal Childhood

ABSTRACT

Children commonly experience negative emotions like sadness and fear, and much recent empirical attention has been devoted to understanding the factors supporting and predicting effective emotion regulation. Respiratory sinus arrhythmia (RSA), a cardiac index of parasympathetic function, has emerged as a key physiological correlate of children's self-regulation. But little is known about how children's use of specific cognitive emotion regulation strategies corresponds to concurrent parasympathetic regulation (i.e., RSA reactivity while watching an emotion-eliciting video). The current study describes an experimental paradigm in which 101 5- and 6-year-olds were randomly assigned to one of three different emotion regulation conditions: Control, Distraction, or Reappraisal. All children watched a sad film and a scary film (order counterbalanced), and children in the Distraction and Reappraisal conditions received instructions to deploy the target strategy to manage sadness/fear while they watched. Consistent with predictions, children assigned to use either emotion regulation strategy showed greater RSA augmentation from baseline than children in the Control condition (all children showed an overall increase in RSA levels from baseline), suggesting enhanced parasympathetic calming when children used distraction or reappraisal to regulate sadness and fear. But this pattern was found only among children who viewed the sad film before the scary film. Among children who viewed the scary film first, reappraisal promoted marginally better parasympathetic regulation of fear (no condition differences emerged for parasympathetic regulation of sadness when the sad

* Corresponding author.

E-mail address: elizabeth.davis@ucr.edu (E.L. Davis).

http://dx.doi.org/10.1016/j.jecp.2015.09.020 0022-0965/© 2015 Elsevier Inc. All rights reserved.

Please cite this article in press as: Davis, E. L., et al. The effects of distraction and reappraisal on children's parasympathetic regulation of sadness and fear. *Journal of Experimental Child Psychology* (2015), http://dx.doi. org/10.1016/j.jecp.2015.09.020

E.L. Davis et al./Journal of Experimental Child Psychology xxx (2015) xxx-xxx

film was viewed second). Results are discussed in terms of their implications for our understanding of children's emotion regulation and affective physiology.

© 2015 Elsevier Inc. All rights reserved.

Introduction

Children commonly experience negative emotions like sadness and fear, and much empirical attention has aimed to clarify the factors that support and predict effective regulation of these negative emotions. This interest is driven, in part, by research linking emotion regulation processes to a host of social, emotional, and cognitive outcomes with substantial consequences for children's daily lives (e.g., academic achievement, friendships, psychopathology). Given the tight conceptual coupling between emotion and regulatory processes (Cole, Martin, & Dennis, 2004; Thompson, 2011), a key challenge for developmental scientists is to identify and employ methods that meaningfully distinguish these affective processes. At the same time, there is a need for improved clarity in our understanding of the psychobiological underpinnings and components of these emotion and regulatory processes. Respiratory sinus arrhythmia (RSA), a cardiac index of parasympathetic function, has emerged as a key psychophysiological correlate of children's self-regulation. But no prior work has examined how children's use of specific emotion regulation strategies predicts parasympathetic regulation. This study experimentally manipulated the emotion regulation strategies that children used while viewing emotion-eliciting films. Our goal was to examine the effects of emotion regulation strategies on parasympathetic regulation of sadness and fear to refine our understanding of emotion regulation during childhood.

Cognitive emotion regulation strategies

A functional view of emotion holds that people experience emotions when they appraise events as relevant to their goals, values, or well-being. Although emotions provide useful status updates about goals, negative emotions must often be down-regulated in the service of long-term goals like positive social relationships and academic achievement. Emotion regulation can be defined as any process that increases or decreases positive or negative emotions (Gross, 1998; Koole, 2009; Ochsner & Gross, 2005; Thompson, 2011). By adulthood, people have a wide range of emotion regulation strategies to draw on when faced with emotionally challenging events (Li & Lambert, 2007; Ochsner & Gross, 2005, 2008; Sheppes & Meiran, 2007). Strategies to alter an emotional experience can be classified, broadly, as behavioral or cognitive. Behavioral strategies allow people to change external events so that the events conform to their goals, whereas cognitive strategies allow people to change their goals, thoughts, or appraisals of events. Use of behavioral strategies to manage emotion emerges early and remains relatively constant in frequency across the lifespan (Heckhausen, Wrosch, & Schulz, 2010). From infancy, children make use of behavioral emotion regulation strategies as they shift attention away from a stranger who makes them feel wary or increase the intensity of their cries to elicit help from parents (Kopp, 1989; Thompson, 1994). In contrast, deliberate use of cognitive strategies to manage emotion requires an appreciation of the interrelation of goals, thoughts, and emotions, including awareness that changing goals and thoughts can lead to changes in emotional experience (Davis, Levine, Lench, & Quas, 2010).

When and how well children can use cognitive emotion regulation strategies is less clear. Evidence in support of regulatory sophistication comes from work demonstrating that children have a (tenuous) understanding of the link between thoughts and feelings from very early in development (Bell & Calkins, 2012). Toddlers and preschoolers talk about emotions and can correctly predict how another person will feel if they get (or do not get) something they want (Wellman & Banerjee, 1991; Wellman, Phillips, & Rodriguez, 2000). The appreciation that two people can react differently to the same event

Please cite this article in press as: Davis, E. L., et al. The effects of distraction and reappraisal on children's parasympathetic regulation of sadness and fear. *Journal of Experimental Child Psychology* (2015), http://dx.doi. org/10.1016/j.jecp.2015.09.020

Download English Version:

https://daneshyari.com/en/article/7274946

Download Persian Version:

https://daneshyari.com/article/7274946

Daneshyari.com