What Do Children Know About Emotion Regulation?
Sara F. Waters, H. Abbie Raikes, Elita A. Virmani, Sara C. Meyer, Rachel Jochem, & Ross A. Thompson

Abstract
Children’s understanding of effective strategies for emotion regulation is a key component of social competence. The current study employed a novel task to evaluate preschool children’s perceptions of the effectiveness of emotion regulation strategies for different negative emotions. Venting was consistently perceived as less effective than other strategies. Children endorsed constructive strategies on an emotion-specific basis, but did not demonstrate dispositional emotion regulation styles as identified in adults. Associations between perceptions of the effectiveness of emotion regulation strategies and regulatory behaviors in a frustration task were found.

Introduction
• Effective emotion regulation is one of the significant achievements of early childhood as it is integral to social competence and psychological well-being.
• Children’s understanding of emotion regulation strategies and their efficacy may be an important component of the development of emotion regulation.
• Few studies have asked children directly what they know about the effectiveness of emotion regulation strategies, but findings indicate children recognize that strategy effectiveness depends on the specific emotion being regulated (Dennis et al., 2009).
• Emotion-specific regulation contrasts with the literature on adults which identifies individuals by dispositional style of emotion regulation such as “reappraisers” (Gross et al., 2003).
• Children who endorse constructive strategies demonstrate more constructive regulatory behaviors (Cole et al., 2009).
• The current study used a novel interview method to examine preschool children’s perceptions of the effectiveness of different emotion regulation strategies for negative emotions and the associations between these perceptions and behavior during a frustration task.

Research Questions
• Do preschool children perceive emotion regulation strategies as differentially effective for different negative emotions? (Liu, 2008)
• Do preschool children demonstrate a dispositional emotion regulation style as seen in adults? (Liu, 2008)
• Do children who perceive constructive emotion regulation strategies as effective exhibit more effective regulatory behavior?

Participants.
73 mother-child dyads. Children’s mean age was 4.52 years (45% female).

Methods

Procedure.
Children and their mothers visited the lab for 2 1-2 hour sessions. During the first visit, children participated in the Emotion Regulation Problem Solving interview while mothers completed questionnaires. During the second visit, dyads participated in a frustration task (Stansbury et al., 2000).

Measures.
In the Emotion Regulation Problem Solving interview, puppets were used to enact vignettes evoking anger, sadness, and fear in the story character. Each emotion vignette demonstrated the puppet’s use of venting, cognitive restructuring, problem solving, and avoidance as emotion regulation strategies. For each strategy, children used simple facial drawings to indicate the puppet’s final emotion state: more intensely negative, no change in negative emotion, less intensely negative, ok, or happy.

In the frustration task, children were given a candy and allowed to eat it with their mothers’ permission. Mothers had been instructed to deny their children the candy. The dyads’ subsequent interactions were recorded for 2 minutes, then mothers were encouraged to allow their children to eat the candy. The presence of children’s behaviors were reliably coded (K = .76) in 30 second epochs from videotape by two trained observers. Regulatory behaviors of interest included demanding or begging for the candy and attempting to transgress the prohibition by eating the candy.

Data reduction.
The 5-point scale of final emotion state was reduced to a 3-point scale: worse, no change, better.

Strategy profile scores were created by summing the final emotion than the other 3 strategies across the emotion situations of anger, sadness, and fear [F(3, 66) = 63.85, p < .001].

Results

• One-way repeated measures ANOVA revealed that children reported venting as significantly more likely to increase negative emotion than the other 3 strategies across the emotion situations of anger, sadness, and fear [F(2,67) = 7.65, p < .001] and avoidance as more effective for sadness than anger or fear [F(2,68) = 8.73, p < .001].

• Dispositional emotion regulation profiles did not emerge as no significant differences were found for individual children’s emotion regulation strategy profile scores.

• In bivariate analyses, children who endorsed the effectiveness of avoidance for regulation of negative emotion were less likely to actively pursue the prohibited candy in the frustration task (r = -.24, p < .05).

Discussion

• The novel Emotion Regulation Problem Solving interview introduced in this study is one of the first to assess preschool children's perceptions of the effectiveness of different emotion regulation strategies.

• Children evidence a functionalist understanding of emotion regulation, endorsing strategies differentially by emotion.

• Children recognize the dysfunctional nature of venting for all negative emotions, but especially for the withdrawal emotion sadness. Avoidance, or removing oneself from a situation, is perceived as a uniquely functional strategy for sadness.

• At this age, children have not yet formed a characteristic regulatory style as seen in the literature on adults.

• Children’s perceptions of emotion regulation are related to their regulatory behavior. Those who endorse avoidance do not actively pursue the candy in the face of mothers’ prohibitions.

Contact Information: sfwaters@ucdavis.edu