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Co- and self-regulation of emotions in the preschool setting

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ABSTRACT

Teachers are important socialization agents as children develop ways to self-regulate their emotions, and this development is considered as an important achievement in preschoolers. The present study investigated two main questions: (1) How preschool teachers change their emotion coaching and co-regulation behavior as children age and as the children's emotion regulation improves, and (2) how teachers' co-regulation is linked to children's self-regulation. Preschoolers aged 4–6 years ($n = 28$) and their teachers ($n = 9$) from three preschool classrooms participated in the study. Based on extensive video recordings of everyday interactions in the classroom, the children's emotionally challenging episodes were identified and analyzed. The results indicated that teachers' emotion coaching and co-regulation occurred more frequently when the child was younger. For older children, teachers showed more intense co-regulation if co-regulation occurred. The better the emotion regulation of the child, as rated through the teachers, the more often teachers started co-regulation by giving unspecific, meta-cognitive prompts. Furthermore, after controlling for age and reported emotion regulation, co-regulation was systematically related to observed self-regulation within episodes. Overall, the results support the assumption that teachers' co-regulation is adjusted to children's developmental level and contributes to their development of self-regulation of emotions.

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1. Introduction

Self-regulation of emotion is considered as one central aspect of the broader concept of self-regulation, and a growing amount of empirical research points out that self-regulation of emotions is associated with competencies that are relevant for school readiness and academic achievement (for reviews see Blair & Raver, 2015; La Paro & Pianta, 2000). Acquiring self-regulation of emotion – those aspects of emotion regulation that the child is able to perform independently of others – constitutes a central developmental task in the preschool age. It has important implications for psychosocial adaptation and the acquisition of other important developmental milestones (Eisenberg, Fabes, Guthrie, & Reiser, 2000; Jones, Greenberg, & Crowley, 2015; Sroufe, 1996).

Children acquire self-regulation of emotion in several socialization contexts. Both parents and teachers significantly contribute to this development of emotion-regulation, providing experiences that promote or hinder developmental achievements (Denham, Bassett, & Zinsser, 2012). Most research to date has focused on how emotion regulation is influenced by the family and parent-

ing (Morris, Silk, Steinberg, Myers, & Robinson, 2007). However, children spend increasing amounts of time in preschool settings, making teachers important agents for children's development (Denham et al., 2012). In Germany, 94% of all 3- to 6-year-olds attended an early childhood education center in 2014. Eighty-six percent of them spent at least 25 h per week and 47% spent 35 or more hours per week at preschool (Bock-Famulla, Lange, & Strunz, 2015). Furthermore, the preschool setting is characterized by many peer interactions involving conflictual situations that challenge children's regulatory capacities. Consequently, the preschool setting provides many challenges and a wide range of possibilities for children to obtain and practice these competencies.

But what are teachers' roles in children's emotion socialization? By extrapolating from studies on parents, Denham et al. (2012) laid out a conceptual framework about teachers' roles in socializing children's emotion regulation that should guide future research. Accordingly, mechanisms identified as promoting this development in the family context (see also Morris et al., 2007) should have similar effects in the early caregiving environment of the preschool. However, little is known about how preschool teachers address emotions and emotion regulation in the preschool setting, given the structural conditions that are very different from the family setting (Ashiabi, 2000). In Germany, preschool classes typically consist of up to 25 children run by two to four preschool teachers
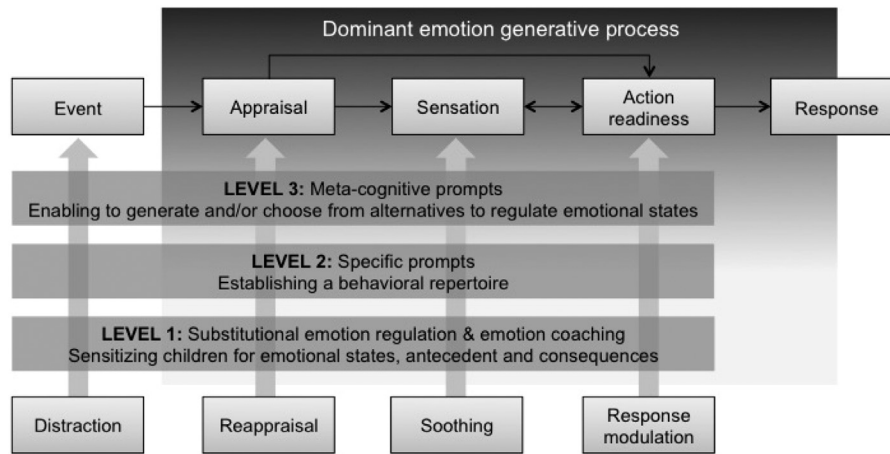
Fig. 1. The internalization model of reflective emotion regulation.

and, on average, each preschool teacher takes care of six to eight children (Bock-Famulla & Lange, 2013). Therefore, the focus of the present study is on teachers' interactions with preschoolers during naturally occurring situations that are emotionally challenging for children. The main aim of this study is to test theoretical assumptions concerning effective ways of co-regulating these situations and, by doing so, to provide evidence that has implications for early educational policy and practice.

1.1. Co- and self-regulation of emotion

During the preschool years, children increasingly learn to control their emotions and to handle their emotions in productive ways (Denham et al., 2012; Eisenberg, 2000). Typically, this occurs in situations that require a delay of need satisfaction or in which motives conflict within or between individuals. In these situations, children must be able to volitionally inhibit or modify their emotions so that the dominant action readiness of the emotion is not enacted but replaced by a subdominant behavioral alternative (Campos, Frankel, & Camras, 2004; Holodynski, Hermann, & Kromm, 2013; Holodynski, Seeger, Hartmann, & Wörmann, 2012). We refer to this process as *reflective emotion regulation*. Children develop their reflective emotion regulation with support from caregivers in at least two ways: first, caregivers facilitate emotional awareness, and second, they co-construct a repertoire of effective emotion regulation strategies.

1.1.1. Emotion coaching facilitates emotional awareness

When children acquire reflective emotion regulation, they have to be able to distance themselves psychologically from a current emotional episode, taking a bird's eye view, in order to evaluate the current episode in terms of causes, consequences, and alternatives (Bischof-Köhler, 2000; Denham, Bassett, & Wyatt, 2007; Eisenberg, Cumberland, & Spinrad, 1998; Holodynski et al., 2013; Saarni, 1999). Children's awareness of their feelings can be promoted by conversations with caregivers about emotions, in which caregivers label feelings and relate emotions to specific causes, appraisals, expressions, behavioral inclinations, and possibilities for regulation (Denham et al., 2007; Morris et al., 2007). A caregiving style that is characterized by conversations about emotions, as, for instance, validating, labeling emotions and emotion talk, is a central feature of what others have called *emotion coaching*, which is associated with children's self-regulation capacities (Garner, Carlson Jones, Gaddy, & Rennie, 1997; Gottman, Katz, & Hooven, 1997; Gottman & DeClaire, 1998). While these previous studies have been primarily correlational, there is one intervention study that

provides evidence that children, whose parents underwent emotion coaching training, had lower levels of negative emotionality and problem behaviors as compared to a waitlist control group (Havighurst & Harley, 2007; Wilson, Havighurst, & Harley, 2012).

1.1.2. Co-regulation catalyzes constructing a repertoire of effective emotion regulation strategies

Once children are aware of their emotions, they can acquire a repertoire of effective emotion regulation strategies. Developmentally, self-regulation emerges from co-regulation, that is, the regulation of the child's emotions through caregivers. Similar to others, we differentiate four general types of emotion regulation strategies that all emerge during the preschool years, namely distraction, reappraisal, soothing, and response modulation, including both the inhibition and modification of emotionally triggered behavioral impulses (Gross & Thompson, 2007; Stansbury & Sigman, 2000).

Following a process model of emotion regulation, different types of emotion regulation strategies have their primary impact at different points in the emotion generative process (Gross & Thompson, 2007). Depending on how an event is appraised, adaptive body reactions (e.g., peripheral-physiological reactions) and a specific action readiness (e.g., expression and impulse of fleeing or attacking) are triggered. These are subjectively experienced as felt sensations (i.e., feelings) that, in sum, lead to motive-serving behavior (see upper half of Fig. 1).

As described above, regulation strategies operate in order to shift from the dominant to a more desirable behavioral response. More specifically, distraction strategies shift the focus to a new event, establishing a line of consecutive processes resulting in a different emotion. Reappraisal strategies are tailored toward taking a fresh look at the same event. Soothing strategies directly address body reactions and felt sensations. Finally, response modulation strategies directly operate on the level of behavioral inclinations and either inhibit or modify these to a more appropriate alternative response. Importantly, all emotion regulation strategies can be used by others to co-regulate emotions and by oneself to self-regulate own emotions. Both co- and self-regulation strategies influence different points in the emotion generative process. However, the emotion generative process may be an ongoing process when co-regulation is applied. For instance, sensations and behavioral inclinations (relatively late processes) can be regulated by re-appraisal strategies (relatively early process) that also affect the following emotion generative processes. In the following, we will lay out how children acquire a repertoire of self-regulation strategies through being supported by co-regulation.