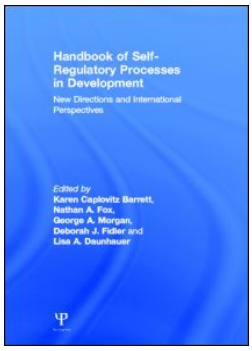


**Handbook of Self-Regulatory Processes in Development**
**New Directions and International Perspectives**
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**Socialization Influences on Children's and Adolescents' Emotional Self-Regulation Processes**

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# 5 Socialization Influences on Children's and Adolescents' Emotional Self-Regulation Processes

## *A Developmental Psychopathology Perspective*

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### INTRODUCTION

Broadly speaking, self-regulation has been defined as "the many processes by which the human psyche exercises control over its functions, states, and inner processes" (Vohs & Baumeister, 2004, p. 1). Thus, one of the core developmental tasks facing children (and their socialization agents) is to learn how to manage behavior, thoughts, and emotions in adaptive ways that lead to positive outcomes. Given the broad, encompassing nature of this term, there is a wide diversity of skills and capacities involved in the development of self-regulatory behavior. The goal of this chapter is to summarize research that examines the development of children's and adolescents' emerging skills in emotional self-regulation from the lens of functionalist theory. A developmental psychopathology (DP) framework is used to interpret research examining parental and peer socialization influences on children's emotional self-regulation skills with an emphasis on how socialization processes direct development towards normative or atypical trajectories of emotion self-regulatory processes. Finally, given the general dearth of empirical attention paid to studying emotion processes in middle childhood and adolescence (Klimes-Dougan & Zeman, 2007), this chapter focuses solely on these developmental periods because this is an age period in which there is dramatic growth in children's ability to *self*-regulate their emotions in an intentional, planful way. In addition, the evolving nature and impact of social relationships during these developmental periods raises intriguing questions concerning the impact of parents and peers on youths' emotion processes and the outcomes associated with these influences.

### FUNCTIONALIST THEORETICAL PERSPECTIVE

Emotion is central to human functioning, yet defining and capturing its essence has posed challenges that can be observed throughout the emotion literature (e.g., Cole, Martin, & Dennis, 2004; Thompson, 1994). Particular difficulties are evident in the attempts to distinguish emotional *experience* from the *regulation* of emotion (Campos, Frankel, & Camras, 2004; Cole et al., 2004) because emotions have been described as regulatory (i.e., serving to control or manage behavior or experience) and regulated (i.e., emotion as the target of management), and have been posited to represent

different aspects of a unitary process (Campos et al., 2004). For the purposes of this chapter, we espouse the following commonly accepted definition of emotion regulation in the developmental literature: "the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (Thompson, 1994, pp. 27–28).

## Role of Socialization

The Functionalist approach places an emphasis on the role that socialization experiences have on children's developing abilities to self-regulate their emotional experience and arousal in accord with both personal goals and the demands of the social context (e.g., Campos, Campos, & Barrett, 1989; Campos, Mumme, Kermoian, & Campos, 1994). Through socialization experiences (i.e., bidirectional interactions) with parents, peers, siblings, teachers, and others, children learn to modulate their emotional expressivity with these agents in ways that are consistent with cultural norms. Through the formative influence wielded by these external sources and with accumulating development, children then internalize these emotion management beliefs and standards and acquire the skill set that enables them to self-regulate their emotions in increasingly complex and diverse situations. Thus, the development and emergence of children's emotional self-regulation skills necessarily occurs within proximal social contexts (e.g., family, peer) and also within the broader cultural milieu (e.g., neighborhood, subculture values). These contexts provide countless opportunities for children to learn both adaptive and potentially non-constructive ways to manage their emotional arousal and experience. As such, effective emotional self-regulation requires many inter-related competencies such as (a) managing emotional displays flexibly in ways that are sensitive to situational cues and cultural norms, and (b) utilizing skills (e.g., support seeking, attentional deployment) that can enhance, not disrupt, functioning, and that can be readily adapted to changing contextual conditions in order to promote adaptive functioning (Thompson, 1994).

## Skills Required for Emotional Self-Management

When considering children's ability to self-regulate their emotions effectively during middle childhood and adolescence, there are myriad skills that need to be mastered in order to become more self-sufficient and purposeful in managing emotional arousal using internal resources. Thompson (1994) outlines six such aspects. First, children learn to control where they direct their attention with respect to managing potentially emotionally arousing situations (e.g., closing eyes during a scary movie scene). Second, they acquire skills to process material related to an emotionally provocative event by altering their interpretations of the information (e.g., "it was only a man dressed up in a costume"). Third, children develop awareness of internal cues associated with emotion and its physiological components and learn to interpret them in constructive ways (e.g., shortness of breath attributed to exercise exertion, not impending panic attack). Fourth, children access resources that can provide assistance in times of emotional arousal, such as recruiting the support of friends, family members, and others when trying to cope with strong emotions, or relying on instrumental forms of support (e.g., playing a video game to quell feelings of anxiety when home alone). Fifth, children can select contexts that limit their access to emotionally arousing situations that may exceed their emotion regulation coping abilities (e.g., not riding the tallest roller coaster). Sixth, children learn to enact emotional responses that are likely to lead to positive outcomes that also meet their personal goals (e.g., saying thank you when receiving an undesirable present to preserve a valued friendship). The variety and array of expressive responses expands and becomes increasingly differentiated with children's development and enables progressively more sophisticated emotion regulatory responses to situational demands. In sum, children learn to self-regulate their emotional responses through dynamic interactions with their social environment that greatly enhance independent self-regulatory efforts.

Empirical efforts to examine the development of emotional self-regulation in children have increasingly been conducted from a DP perspective, as it offers a coherent framework for conceptualizing children's psychological and emotional development including the emergence of both adaptive and maladaptive outcomes (Sroufe, 1997). The DP framework provides invaluable guidance in understanding the mechanisms and principles for *how* self-regulation and in particular, emotional self-regulation, can influence the development of particular trajectories leading to adaptation or disorder in youth.

## DEVELOPMENTAL PSYCHOPATHOLOGY PARADIGM

Sroufe and Rutter (1984) define the field of developmental psychopathology as "the study of the origins and course of individual patterns of behavioral maladaptation, whatever the age of onset, whatever the causes, whatever the transformations in behavioral manifestation, and however complex the course of the developmental pattern may be" (p. 18). Central to this perspective is the "emphasis given to discovering processes of development, with the goal of comprehending the emergence, progressive unfolding, and transformation of patterns of adaptation and maladaptation over time" (Cicchetti & Sroufe, 2000, pp. 258–259). The examination of these processes is conducted from an interdisciplinary approach because a central tenet posits that no single theory can adequately explain all aspects of psychological development and maladjustment. Rather, developmental processes as they relate to psychological functioning are most completely understood through reliance on and integration of multiple levels of analyses that arise from a variety of disciplines, each with unique theoretical views and methodological approaches. Although there are numerous foci that characterize this perspective (Cicchetti & Rogosch, 2002), this chapter highlights research on two aspects including (a) the study of the processes underlying continuity and change in patterns of both adaptive and maladaptive behavior, and (b) the linkages and dynamic, transactional interplay between normative and atypical processes. A description of these two aspects is presented first with in-depth analyses and application of these facets to emotional self-regulation processes integrated throughout.

## CONTINUITY AND CHANGE IN DEVELOPMENT

### Principles that Guide Development

The course of typical and atypical development is considered to be lawful and coherent (Sroufe & Rutter, 1984) such that in any given domain, individuals develop in an orderly fashion that follows developmental principles of growth. Santostefano (1978) proposed four principles that guide development and provide its coherence. First, *holism* is the notion that all spheres of development are interconnected and operate in a transactional manner. Thus, the development of emotion regulation is influenced by and requires development in other domains such as cognitive (e.g., perspective-taking skills), biological (e.g., vagal tone), social (e.g., awareness and sensitivity to culture-specific display rules), and language (e.g., ability to use self-talk). Second, *directness* refers to the concept that children actively shape their environment and are not passive recipients of experience (Scarr & McCartney, 1983). An interaction of genetic influences, a history of prior experiences, and a series of adaptations to environmental influences place children on their unique developmental trajectory. For example, a child who is temperamentally behaviorally inhibited may select environments (i.e., niche picking) in which extraversion is not a required skill (e.g., staying home to read rather socializing) and through repeated experiences over time (e.g., choosing solitary over social activities), this biological predisposition to introversion or inhibition is reinforced by the environmental choices that reduce anxiety.

Third, the construct *differentiation of modes and goals* proposes that with development, children's behavior becomes increasingly flexible, organized, and differentiated, which promotes adaptation to

increasingly complex environmental demands. Individual variability in differentiation results in different trajectories of psychological adjustment. For example, one aspect of emotional competence is the ability to respond flexibly to the demands of the social context by altering or modifying emotional reactivity and/or expressions to align with individual's inter- and intrapersonal goals (Saarni, 2008). By adulthood, the lack of flexible use of emotion regulation strategies is associated with negative interpersonal relations and poorer psychological well-being (Gross & John, 2003).

Fourth, the principle of *mobility of function* refers to the notion that undifferentiated forms of behavior become hierarchically integrated into later forms of behavior. Thus, rudimentary emotion management skills (e.g., in infancy, looking away from a novel stimulus to down-regulate excitement or anxiety) are consolidated and become the foundation for later skills. According to Saarni's (1999) theory of emotional competence, skills such as emotional decoding and emotional awareness set the stage for more sophisticated forms of emotion competence, such as emotion regulation, to emerge and develop. Behavioral stability or homotypic continuity is not predicted, particularly across different developmental stages. Rather, heterotypic continuity is expected involving the "persistence of the underlying organization and meaning of behavior despite changing behavioral manifestation" (Cicchetti & Rogosch, 2002, pp. 13–14). For example, in terms of emotion regulation processes, continuity is expressed in the child who experiences anxiety and hides behind her parent's legs as a youngster during times of transition and then as an adolescent responds to this stressor with irritability, door slamming, and social withdrawal to her room away from family and peers.

### How Early Experience Impacts Later Development

Rutter (1981) has proposed several ways in which early experience may impact later development. Direct linkages occur when an early experience (a) leads to the outcome which then endures, (b) initiates physical changes that affect subsequent functioning, or (c) produces a change in behavioral patterns that over time leads to maladaptive functioning. Indirect linkages between early experience and later disorder may also occur such that (a) early experiences may alter family functioning that then produces disordered behavior in the child over time, (b) the experience of early stress shapes the development of coping responses that can act to buffer children against the effects of stress or place them at increased risk for disordered behavior, (c) through early experiences, modification of self-concept transpires that influences future response selection and enactment, and (d) early experiences affect later behavior through children's selection of subsequent environments. Thus, experiences at one developmental period set the stage for subsequent adaptations and, in this way, development is characterized by patterns of heterotypic continuities, discontinuities, and behavioral transformations.

## INTERPLAY BETWEEN NORMATIVE AND ATYPICAL DEVELOPMENT

A defining feature of the DP perspective is its emphasis on examining typical and atypical development in concert because they are mutually informing and provide a comprehensive understanding of development (Sroufe, 1990). Delineating the pathways to competent versus incompetent functioning, particularly when faced with conditions of adversity or other derailing environmental influence (e.g., risk research) can help us in understanding similarities and differences in origins of typical and atypical development. Furthermore, because psychopathology is considered to be developmental deviation, delineating atypical development is reliant on knowledge of what is typical. Moreover, understanding atypical responses may inform understanding of typical development. In normative behavior, the individual processes involved in a development of a skill or task are sometimes so inextricably intertwined and integrated that it is difficult to distinguish each component and its role in the construction of the behavior under examination. Illumination of these component processes can sometimes be clarified by examining atypical development in which functioning in one of the specific facets is amiss.

For example, research on emotion processes in youth with anxiety disorders has incrementally increased our understanding of the various components that comprise emotionally competent behavior in typically developing children. That is, anxious youth exhibit high emotional reactivity (Jacques & Mash, 2004), poorer coping with emotionally arousing situations, less emotional understanding (i.e., the causes and consequences of emotion elicitation) but display no differences from nonanxious youth in emotional awareness including identifying emotion cues and recognizing the experience of multiple emotions (Southam-Gerow & Kendall, 2002; Suveg & Zeman, 2004). Taken together, anxious youth seem to have a deficit in applying their awareness of emotion cues to constructive management of their emotions suggesting that knowledge of emotion-related skills is necessary but insufficient to ensure adaptive emotion regulation (Zeman & Suveg, 2012). Thus, examination of the transactions between typical and atypical developmental processes provides a sharp lens from which to view and understand the pathways to both positive outcomes and maladaptation. The intent of this chapter is to provide a summary of the literature examining the processes involved in both normative and atypical emotion regulation socialization practices by two central socialization influences (i.e., parents, peers) in order to provide a more complete understanding of children's emerging emotional self-regulation skills.

## Developmental Pathways Approach

Delineating the developmental pathway or trajectory that leads to adaptation and/or disorder is a central goal of the DP perspective. There may be multiple pathways to a single outcome (termed *equifinality*), as is the case with the emergence of depression in children and adolescents (Duggal, Carlson, Sroufe, & Egeland, 2001). Some children may start on this pathway through biological vulnerability whereas others may experience environmental adversity such as maltreatment or a lack of maternal emotion support, yet these children will demonstrate phenotypic similarity in their outcome (Cicchetti & Rogosch, 2002). Effective intervention and prevention efforts may depend on understanding the origins and pathways rather than simply using the final outcome as a marker of the developmental deviation. Further, Cicchetti and Sroufe (2000) have challenged researchers to go beyond determining the antecedent of a behavior to addressing the question, "What are the factors that initiate and maintain individuals on pathways probabilistically associated with X and a family of related outcomes?" (p. 257). This chapter examines one such factor, parental and peer emotion socialization processes, to provide a preliminary response to this query concerning influences on children's developing emotional self-regulation.

The concept of *multifinality* asserts that individuals may begin at a common origin (e.g., low birth weight) but the resultant outcomes may diverge, producing dissimilar outcomes for different individuals (e.g., learning disabilities, stunted physical growth, no apparent developmental deviation). The apparent diversity in outcomes is due to the interaction of biological person-specific variables with environmental experiences, and the dynamic interplay of risk and protective processes unique to each individual (Sroufe, 1997). It is important, however, to consider that the outcomes may be phenotypically dissimilar but genotypically may represent more similarity than initially evident. Thus, research must strive to address the question, "What differentiates those progressing to X from those progressing to Y and those being free from maladaptation or handicapping condition?" (Cicchetti & Sroufe, 2000, p. 257). In the following sections, an overview of research delineating the trajectories to adaptation and disorder as a function of the socialization of emotional self-regulation is presented.

## Role of Contextual Influences

The DP perspective emphasizes the role of environment and specific contexts when connecting developmental trajectories to particular outcomes. The distinct role that culture plays in children's adaptation is of utmost importance and aligns with the bioecological model of development

(Bronfenbrenner, 1979) by emphasizing the role of both proximal (i.e., micro-system factors) and distal (i.e., meso-, exo-, and macro-system factors) systems on development. Thus, children's cultural norms, socialization practices, and values must be incorporated into conceptualizations when determining whether a particular behavioral pattern represents a maladaptive response to the demands of the dominant culture (Rutter & Sroufe, 2000).

In sum, the DP perspective places utmost importance on conceptualizing developmental processes as arising from a confluence of genetic and environmental influences as well as prior developmental history (Sroufe, 2002). Disorder or maladaptation is viewed as an outcome of a developmental process with the research agenda focused on identifying the precursors, markers, and consequences of this process. Thus, the investigation of emotion self-regulation processes in children must include the normative trajectory of development within this particular domain, carefully demarcating the antecedents and outcomes of different processes implicated in the attainment of these skills in order to understand the developmental processes that may produce maladaptive or dysregulated emotional and related behavioral outcomes. In the remainder of this chapter, the extant research examining parental and peer processes of socialization of children's emotional self-regulation will be reviewed from a DP perspective.

## PARENTAL SOCIALIZATION OF CHILDREN'S EMOTIONAL SELF-REGULATION

Decades of research supports the contention that parents are the most important external sources of influence on the development of emotion regulation in early childhood (Thompson & Meyer, 2007). In contrast, much less is known about the contribution of parents to the development of emotional self-regulation in middle childhood and adolescence (Klimes-Dougan & Zeman, 2007) and whether their role continues to exert critical influences in the ongoing refinement of children's emotional competencies during these periods. Increasing understanding of the processes, including socialization influences, involved in children's developing emotion regulation abilities in these developmental periods is critical given the established pathways from emotion processes to important psychosocial outcomes (e.g., Mullin & Hinshaw, 2006; Sheeber, Allen, Davis, & Sorenson, 2000).

Parental influences can be summarized by the construct of socialization, a process that involves transactions between a child and caregiver that facilitate the acquisition of valuable information about emotional self-regulation. Overall, parents socialize children's developing emotional self-regulation abilities by actively structuring a child's emotional world and shaping emotional understanding, emotion regulation strategies, and knowledge of and adherence to culturally appropriate display rules through a variety of means (Morris, Silk, Steinberg, Myers, & Robinson, 2007). In essence, parents influence the development of emotional self-regulation abilities by being emotional role models, "setting the stage" (i.e., controlling aspects of antecedent environments), and providing feedback in response to children's emotional behaviors. Several mechanisms of parental socialization have been identified and categorized as indirect methods (i.e., do not involve a direct reference or response to a child's emotional behavior) and direct methods (i.e., contingencies for emotional behavior) that are consistent with principles of social learning theory (Foster, Kendall, & Guevremont, 1988). Research also indicates different developmental trajectories related to socialization mechanisms as a function of emotion type, age, and gender (Morris et al., 2007). Further, because the main forum for parental socialization of emotion is parent–child interactions, parents' ability to regulate their emotional reactions to children's affective behavior plays a central role in socialization efforts. This notion underscores the transactional, dynamic nature of parental influence on children's emotional development. The complex interplay between children's emergent emotional abilities and parental socialization behaviors offers numerous potential mechanisms to help explain developmental continuity/discontinuity, equifinality, and multifinality.

## PARENTAL SOCIALIZATION PRACTICES AND NORMATIVE EMOTIONAL SELF-REGULATION

In middle childhood, the transition from co-regulation of emotion in the caregiver–child relationship to self-regulation has advanced considerably. By age 10, children begin to demonstrate emotion regulation abilities and strategies that approach the quality and finesse of those exhibited in adulthood (Saarni, 1984). Consistent with the functionalist theory's emphasis on contextual influences on development, over time, children learn what does and does not work and what they can and cannot do in their emotional lives, as a response to the demands of the social environment and their inter- and intrapersonal goals. Concurrent increases in understanding of culture-specific display rules and in the frequency of adherence to these rules occurs throughout the elementary school years, suggesting gains in both knowledge and self-regulation ability (Saarni, 1999). For example, as children get older, they increasingly expect different levels of interpersonal support from fathers compared to mothers for expressions of anger and sadness, (e.g., supportive versus dismissing responses to the emotional display; Zeman & Shipman, 1996). With increasing age, children report expecting negative responses from their fathers for emotional displays and, accordingly, report inhibiting their negative emotions more in the presence of their fathers than mothers, illustrating the power of the emotion socializing forces present in the parent–child relationship. From a DP perspective, aberrations in children's acquisition and flexible use of culturally accepted display rules may represent a precursor to maladaptation through the *directness* principle (inappropriate displays shape environmental responses) and by insufficient differentiation of emotional expressivity.

Identifying mechanisms that lead to differing trajectories is critical to understanding both normative and atypical outcomes. Transmission of cultural display rule knowledge via parental socialization appears to be such a mechanism, leading girls and boys to often face unique emotional challenges and differing socialization experiences, which, in turn, are associated with divergent outcomes beginning in early childhood. Specifically, through parental socialization, boys are encouraged to inhibit the expression of sadness and girls are encouraged to inhibit the expression of anger, at least in Western culture (Gnepp & Hess, 1986), reflected in self-reported expectancies for contingent support for these emotion displays. These findings offer a potential starting point for understanding continuity/discontinuity of development by promoting or inhibiting flexible and differentiated emotional behavior.

Similar trends emerge in middle childhood, with girls more likely than boys to "put on a happy face," and boys exhibiting a more stoic stance when experiencing negative emotions in the presence of strangers. Interestingly, it appears that these tendencies may reflect different abilities rather than purely motivation factors. Specifically, research has indicated that even when motivated to mask sad or disappointed feelings, grades 1 and 3 boys are less able than girls to disguise their displeasure when receiving a disappointing gift (Davis, 1995), suggesting that differential environmental responses (i.e., socialization) directly impact the development of emotional self-regulation skills. It may be that boys are more expressive of certain emotions and require stronger parental socialization efforts to help them manage these expressions in culturally acceptable ways.

Despite increases in knowledge about emotion, understanding of cultural display rules, and emotional self-regulation abilities by the end of middle childhood, adolescents tend to report extreme positive and negative emotions more frequently than younger children or adults (Larson, Moneta, Richards, & Wilson, 2002). This suggests that adolescents face new emotional challenges as they consolidate self-regulation skills acquired in childhood. In addition, adolescents must balance their increasing desire for autonomy with the realization that they often need assistance from others (e.g., parents; Cicchetti & Rogosch, 2002). Because self-regulation of emotion develops across the lifespan, it follows that parental socialization practices continue to exert influence on the refinement of these abilities in both the middle childhood and adolescent developmental periods. Further, the transition to adolescence offers a prime opportunity to examine the DP principle of *mobility of function* as it relates to developmental continuity/discontinuity of increasingly differentiated forms of emotional behavior.

### Modeling

Parents continue to shape emotional development in older children through indirect (e.g., modeling) and direct pathways (e.g., contingencies). When parents express emotions through verbal, facial, and behavior modalities, children are provided with a model of how to respond when experiencing an emotion. The role of modeling and imitation may be most prominent during parent–child interactions that involve children's expression of negative emotion. As parents regulate their own affective experience, children will be the recipient of their parents' contingent response and have the opportunity to observe their parents' emotion management style.

Research conducted with older children suggests that this socialization pathway continues to exert a meaningful influence in middle childhood (Eisenberg et al., 2003) and adolescence (Moilanen, Shaw, & Fitzpatrick, 2010). Several studies conducted by Eisenberg and colleagues suggest that parental modeling of emotional behavior continues to shape children's "effortful control" (i.e., ability to shift attention, focus attention, exert control over behaviors) over emotions into middle childhood. In one study, 4- to 8-year-old children completed a behavioral measure of task persistence and mothers and teachers rated children's effortful control. Maternal emotion expressivity was assessed through observation and self-report. Results indicated that children's effortful control was positively related to mothers' expression of positive affect and inversely associated with their expression of negative affect (Eisenberg et al., 2001). Moreover, the relation between positive maternal expressivity and children's effortful control continued to be significant two years later, even after accounting for prior levels of children's regulation ability (Eisenberg et al., 2003).

These results are consistent with research using early childhood samples that document links between high levels of maternal negative expressivity and lower mother-rated emotion regulation abilities in their children (Ramsden & Hubbard, 2002). Furthermore, the link between parental modeling and emergent emotional self-regulation has also been found in samples of adolescents (Burrowes & Halberstadt, 1987; Cunningham, Kliewer, & Garner, 2009). For example, adolescents from families with reportedly higher levels of negative emotional expressivity indicated having more difficulty than peers exerting control over anger (Burrowes & Halberstadt, 1987). Taken together, these studies suggest parents' negative emotional expressivity is negatively related and their positive emotional expressivity is positively related to the development of emotional self-regulation abilities in their children. More research is needed to determine direction of effect, particularly for negative expressivity, as well as whether this effect is primarily due to differences in parental expressivity, regulation, or both, particularly with respect to negative emotion.

### Contingencies

Perhaps the most direct method of parental socialization of emotional self-regulation occurs when parents respond behaviorally to their children's affective behavior. Consistent with social learning theory (Bandura, 1977), parents' contingent responses to their children's emotional behaviors exert a profound effect on the children's developing ability to self-regulate emotions (Thompson & Meyer, 2007). Specifically, parents set boundaries for acceptable and unacceptable forms of emotion management through the reinforcement or punishment of children's emotional experience and behavior. Contingencies offer invaluable information about the consequences of expressing emotions in a variety of contexts. In addition, the nature of parent–child interactions during emotional situations influences how children appraise their own emotionality. Finally, parents' own emotion regulation abilities may play a critical role in determining how and why parents respond to children's emotional behavior in particular ways (Cassano, Zeman, & Perry-Parrish, 2007).

A recent body of research has provided direct support for the link between parental contingencies and specific emotional self-regulation strategies (e.g., Eisenberg et al., 1999; Fabes, Leonard, Kupanoff, & Martin, 2001; McElwain, Halberstadt, & Volling, 2007). In these studies, parents were asked to respond to 12 vignettes by indicating the likelihood of reacting to 3- to 16-year-old

children's expression of negative emotion in six ways using a seven-point Likert scale: *emotion focused* (i.e., guidance on how to manage the internal affective state), *problem focused* (i.e., guidance on how to manage emotions by altering the environment or engaging in problem solving), *expressive encouragement* (i.e., promoting outward expression of feelings), *minimization* (i.e., downplaying severity of situation/response), *punitive* (i.e., providing negative consequence for affective expressivity), and *distress* (i.e., expressing own upset in reaction to child's emotion). Using a variety of ways to assess outcomes (e.g., interviews, behavioral observations, questionnaires) and incorporating multiple reporters (i.e., parent, teacher, self), findings consistently indicate that emotion-focused and problem-focused parental responses, as opposed to punitive and minimizing reactions, lead to more adaptive emotion regulation behaviors (e.g., less emotional reactivity, more constructive coping, less intense emotional arousal, well-modulated verbal expressivity) and psychological outcomes (e.g., social competence).

This body of research also indicated that negative socialization responses (e.g., punitive) result in children learning to hide and/or suppress the expression of negative emotion (i.e., anger, sadness, fear). When parents endorsed more minimizing and punitive responses to negative emotions in general, children exhibited more intense emotional arousal, greater emotional reactivity, were less likely to engage in problem-solving behaviors or ask for help from others, and were more likely to suppress negative affect when angry. Children from these families appear to learn that there is a price to pay for expressing negative affect and attempt to control at least anger on their own, albeit ineffectively. Evidence also suggests a pathway from parental emotion socialization to social outcomes such that parents who endorse a greater likelihood of negative responses to any display of negative emotion have children who exhibit more frequent and intense negative affect in the classroom and have significantly lower social competence ratings (Fabes et al., 2001). This effect may be mediated by parental distress in that parental reactions had the strongest effect when parents experienced distress (e.g., poor parental emotion regulation skills) in response to their children's negative emotions. It should be noted that these findings remained significant after controlling for individual differences in child temperament (i.e., negative emotionality), making it less likely that parents' behavior primarily reflected their reactions to a history of difficulties with children's emotionality. Nonetheless, these studies provide cross-sectional information, thereby making it impossible to differentiate between alternative hypotheses (e.g., reverse direction of effects, genetic inheritance of emotional attributes).

Overall, these findings indicate that parents who respond to their children's negative emotionality with a high degree of responsiveness, warmth, and acceptance have children who exhibit more adaptive emotional self-regulation abilities. In contrast, parental responding by minimizing or punishing children's emotional experiences and behaviors appears to lead to less adaptive outcomes. Stated simply, parental contingencies for emotional behavior in older children and adolescents continue to represent an important influence in the establishment and/or continuity/discontinuity of developmental trajectories toward adaptive emotional self-regulation abilities.

## Coaching

The construct of meta-emotion (Gottman, Katz, & Hooven, 1996) refers to thoughts, feelings, attitudes, goals, and personal philosophies about affective phenomena that influence parental responses to children's affective expressions. Based on a series of interviews with adults concerning their history and philosophies of emotions, Gottman and colleagues (1996) describe two types of parent: emotion dismissing and emotion coaching. Parental behaviors that lead them to be classified as coaching are characterized as positive socialization responses that reflect a common philosophy about children's emotionality. Specifically, parents who primarily adopt a coaching perspective perceive a child's experience of negative affect as generally healthy and an opportunity for teaching, are more "tuned in" to or aware of their children's emotional experiences as well as their own, regulate their own emotional reactions to children's affective experiences, set clear behavioral limits

for emotional behavior, communicate empathic concern and understanding, attempt to understand their child's feelings, help their child to verbally label feelings, and problem solve with their child to find the most constructive way to manage emotional situations.

Contrariwise, parents who primarily use emotion-dismissing responses believe that experiencing a negative affective state is harmful, fail to notice lower intensity emotions in children and themselves, lack a rich emotion vocabulary, exhibit more dysregulated behavior the longer the child experiences a negative emotion, attempt to protect children from experiencing a negative emotion and experience a sense of failure when they are unable to do so, discourage emotion regulation responses that involve introspection, and take their children's emotion regulation efforts into their own hands (e.g., try to distract the child) without allowing the child to make an attempt at regulation.

Meta-emotion theory states that individual differences in parents' meta-emotion philosophies are reflected in specific socialization behaviors during parent–child interactions, which, in turn, are related to children's emotional development. Recent studies, discussed later in the chapter, have established a foundation of support for the role of meta-emotion philosophy in parental socialization of emotion beyond early childhood.

In the first studies to investigate the meta-emotion construct (e.g., Gottman et al., 1996), parents were interviewed about their meta-emotion philosophy while preschool-aged children's emotion regulation was assessed by vagal tone, a physiological measure linked to emotion regulation abilities because the vagus nerve controls changes in heart rate when faced with acute stressors (Porges, Doussard-Roosevelt, & Maiti, 1994). Children's vagal tone was assessed at different points while they watched clips of neutral and emotionally evocative scenes from movies (e.g., flying monkey scene in *The Wizard of Oz* for excitement) and during a parent–child interaction task. Parental behaviors during the interaction task were coded for the use of derogation, scaffolding, and praise. Three years later, indices of children's emotion regulation, behavioral problems, social competence, academic achievement, physical illness, and aggression were obtained through teacher and parent ratings.

Several significant findings emerged from this study. First, coaching parents had children with higher vagal tone, indicating greater ability to down-regulate affective arousal. Children's vagal tone at age 5, in turn, predicted children's ability to down-regulate emotional arousal without external support at age 8. High vagal tone at age 5 was also related to higher parent- and teacher-rated social competence and lower externalizing behavior problems at age 8. Further, coaching parents had children with significantly fewer physical illnesses and better academic achievement and peer relations than dismissing parents. Support for the mediational role of parental socialization behavior was also obtained in that parental coaching philosophies were negatively related to the use of derogation during the interaction task, with derogation predicting later problems with peer relations and dysregulated negative affect. Although these results are preliminary and the direction of effects between vagal tone and parents' meta-emotion philosophy is unclear, it appears that greater parental acceptance of children's negative emotion and more coaching-related behaviors are associated with more adaptive emotion regulation during childhood.

Additional research indicates that children's emotion regulation development in middle childhood may be related to the interaction between emotion-coaching and emotion-dismissing parental behaviors. Specifically, Brody and Ge (2001) examined the relations between parental nurturance and support in response to emotional behavior, behaviors that are consistent with conceptions of an emotion-coaching parent, and children's emotional control in a sample of 11- to 12-year-old children. Using multiple assessment methods (i.e., youth report, parent report, observer ratings), findings indicated that parental coaching behaviors predicted higher levels of children's emotional self-regulation 1 and 2 years later. Recent studies have found similar positive associations between emotional self-regulation and parental coaching behaviors, including increased regulatory support and low levels of antagonism (Moilanen et al., 2010), adolescent perception of parental intent to help and provide support during emotional events (Padilla-Walker, 2008), and parental belief that it is their responsibility to help guide their child's emotion socialization (Dunsmore, Her, Halberstadt, & Perez-Rivera, 2009).

Importantly, the link between coaching and emotional development in middle childhood appears to differ as a function of child and parent gender. For example, recent research found that parents reported a tendency to encourage the expression of sadness and respond with problem-solving suggestions more with daughters than with sons in a sample of children ranging from 6- to 10-years-old (Cassano et al., 2007). In addition, fathers reported experiencing more distress when their sons expressed sadness compared to a similar situation with their daughters.

Another recent study examined socialization effects in middle childhood/early adolescence as a function of child and parent gender by coding coaching and dismissing behaviors by parents during a triadic interaction task (i.e., conversation about children's historical emotional events) with their son or daughter (Lunkenheimer, Shields, & Cortina, 2007). Several interesting findings emerged. First, a predicted negative relationship between combined parents' use of coaching and dismissing statements for positive and negative emotions was observed after controlling for the total number of emotion words used by the family during the task. The use of parents' coaching statements related to negative emotions was negatively associated with father-rated emotional lability and teacher-rated internalizing problems in children. Coaching of positive emotions was not associated with any outcome measure. The number of parents' emotion-dismissing statements was associated with paternal ratings of less adaptive emotion regulation abilities and higher internalizing and externalizing symptoms. Interestingly, a significant interaction between the number of coaching and dismissing responses made by parents arose such that although dismissing responses were a risk factor for poor emotion regulation development and affective dysregulation in childhood, this effect was buffered by the presence of coaching statements regarding negative emotions for mother-rated outcomes. In addition to establishing an interactive link between parental socialization behaviors and children's emotion regulation development, these findings highlight the importance of acquiring knowledge of the socialization behaviors of the entire parental system and the need for multiple sources of children's outcome data (i.e., mother, father).

Clearly, behaviors classified as coaching overlap with other direct and indirect methods of socialization as they involve parents' own emotions can occur during parent–child interactions, and may take place in response to the affective display of a child. For these reasons, coaching and teaching about emotional self-regulation represent key processes of emotion socialization. Taken together, parents exert considerable yet changing influences on children's developing emotional self-regulation skills in middle childhood and adolescence. From a DP perspective, delineating the factors associated with normative development is critical in understanding how, why, and under what circumstances children acquire the skills to self-manage emotions. Further, because abnormal and normal development is fueled by the same set of principles, it is important to examine these processes in children exhibiting maladaptive emotional self-regulation.

## PARENTAL SOCIALIZATION AND ATYPICAL EMOTIONAL SELF-REGULATION

The notion that emotional self-regulation problems constitute prominent risk factors associated with childhood and adolescent psychopathology has been a cornerstone of the DP approach (Cicchetti, Ackerman, & Izard, 1995), and understanding parental socialization of emotion self-regulation in atypical populations may help elucidate issues of continuity/discontinuity, equifinality, and multifinality. The following discussion provides a brief overview concerning the role of parental socialization, emotional self-regulation development, and the emergence, maintenance, and treatment of externalizing and internalizing problems in middle childhood and adolescence.

### Externalizing Problems

Deviations in the development of emotional self-regulation skills have been implicated in the emergence of externalizing symptoms (for a review, see Mullin & Hinshaw, 2006). For example, Eisenberg and colleagues (1996) found that children with externalizing problems (e.g., aggression, disruptive behavior) were more likely than their peers to overtly express anger, exhibit impulsivity,

and demonstrate an impoverished repertoire of skills to cope with anger and sadness. Similarly, Cole, Zahn-Waxler, and Smith (1994) found that boys at risk for behavioral problems expressed anger more frequently when faced with disappointment than boys with no psychological difficulties. Conversely, high-risk girls were more likely than the no pathology comparison group to inhibit emotional expression in response to disappointment indicating different risk factors for externalizing difficulties associated with emotion dysregulation based on gender.

Deficits in the capacity for self-regulation are a core feature of contemporary models of attention-deficit/hyperactivity disorder (ADHD) as a disorder of behavioral inhibition (Barkley, 2006). As an example of research supporting Barkley's model, Walcott and Landau (2004) found that compared to same-aged peers without behavior or emotional problems, boys diagnosed with ADHD exhibited less control over their emotional expressions when instructed to do so during a task designed to elicit frustration. Finally, using an African American sample, Hubbard (2001) found that aggressive, socially rejected children exhibited greater facial and verbal expressivity when angry. Interestingly, the aggressive, rejected children were also more likely to express happiness during a game, highlighting the importance of studying the regulation of both positive and negative valence emotions.

## Emergence and Maintenance of Emotional Self-Regulation Problems

A growing literature base has attempted to gain insight into parenting processes that predict adaptive versus maladaptive developmental trajectories related to externalizing problems. Although relatively few studies directly address these issues, existing evidence suggests that parental socialization of emotional self-regulation may play important roles in the development, maintenance, and exacerbation or amelioration of externalizing symptoms. As an example of parenting effects on the emergence of externalizing problems, paternal patterns of stimulation and regulation of child behavior have been shown to predict the emergence of ADHD symptoms (Carlson, Jacobvitz, & Sroufe, 1995; Jacobvitz & Sroufe, 1987). Specifically, inattentive symptoms of ADHD (i.e., distractibility) were found to be better predicted by a combination of inattention in early childhood and parenting variables (i.e., intrusiveness, overstimulation) compared to using early inattention as the sole predictor. In addition, evidence of equifinality was demonstrated by an identification of two discrete pathways to inattention and hyperactivity, one pathway characterized by children with motor immaturity in infancy and a second by family contextual variables that served as risk factors (i.e., parental intrusiveness, parental relationship status). As an example of multifinality, results from these studies also indicated that the best predictor of behavior change (i.e., clinical to non-clinical levels of symptoms) from early to middle childhood was changes in mothers' relationship status (e.g., from single to married). Although research has yet to tease apart specific mediators of this relationship, it can be speculated that with increasing social support, parents engage in more frequent use of socialization behaviors that promote self-regulation of behavior and emotion.

Other sources of evidence highlight the bidirectionality of the relationship between parental contingencies and children's deficits in emotional self-regulation such as those that are prominent in children who meet criteria for ADHD. Specifically, relations between parental contingencies, parental emotional self-regulation, and children's emotional self-regulation have been documented in a sample of boys with ADHD. Melnick and Hinshaw (2000) recruited 6- to 12-year-old boys and their parents to participate in a task designed to elicit frustration in the child (i.e., building a Lego model with two missing pieces). Parents were told that they could offer assistance but could not build the model themselves. Several parenting behaviors were coded during the task, including positive socialization responses (i.e., giving advice, providing encouragement and affection, helping to structure the task, responding to son's distress), negative responses (i.e., negative expressivity, intrusive or controlling behaviors, withdrawal), and parents' emotional behavior (i.e., anxiety/distress, overall ability to manage and maintain attention, interest, emotional expressivity). Parenting behaviors were associated with boys' observed emotional behavior during the task. Specifically,

maternal negative expressivity was negatively associated with boys' overall regulatory abilities. Fathers who exhibited higher levels of controlled emotional expressivity and provided more advice had sons with higher observed emotional self-regulation abilities during the task. Finally, maternal and paternal anxiety and distress were negatively related to boys' emotional self-regulation abilities. Overall, these findings provide support for the notion that differences in boys' regulatory abilities are uniquely associated with both fathers' and mothers' socialization responses and own emotional regulation abilities in a sample of children with a core deficit in general self-control (i.e., ADHD). Although directionality cannot be assumed given the cross-sectional nature of this study, parental socialization influences may serve to maintain maladaptation associated with ADHD symptoms by impeding the development of effective emotional self-regulation strategies.

## Treatment, Emotion Socialization, and Emotional Self-Regulation

In addition to investigations of parenting processes in families of a child with ADHD, recent research has provided insight into the nature of the relations between parental socialization and other externalizing problems in middle childhood and adolescence. For example, mothers of children diagnosed with conduct disorder are less likely to exhibit coaching behaviors in response to their child's affect compared to children without behavior problems (Katz & Windecker-Nelson, 2004). Ramsden and Hubbard (2002) examined the influence of family expressiveness, maternal coaching, children's emotion regulation, and aggression in grade 4 children. Findings indicated high levels of negative family expressivity and low levels of maternal coaching predicted higher levels of aggression and these relationships were mediated by children's emotion regulation abilities. The link between negative parental expressivity and externalizing symptoms has also been replicated in an adolescent sample (Stocker, Richmond, Rhoades, & Kiang, 2007) although the relation between parental coaching (mothers and fathers were included in the study) and externalizing symptoms was not found. This finding, in conjunction with the other findings just reviewed, suggests the possibility that there are different relations between parental behavior and outcomes at different developmental stages such that externalizing symptoms in adolescence may be more affected by the immediate family emotional environment context than by parental involvement in co-regulation. This possibility deserves further study, using a longitudinal design.

To understand how parental socialization of emotional self-regulation can play a role in change from maladaptation to adaptation it is helpful to examine parent-mediated interventions with documented efficacy for improving functioning in children and adolescents who exhibit externalizing problems. Commonly referred to as "parent training" or "parent management" programs, several decades of research support parent-mediated behavioral therapy as a key element of treatment approaches for ADHD, oppositional defiant disorder, conduct disorder, and aggression (Eyberg, Nelson, & Boggs, 2008; McMahon, Wells, & Kotler, 2006; Pelham & Fabiano, 2008). Inspection of common elements and behaviors targeted by these interventions reveals that the "active ingredient" may be techniques that change the way self-regulation, in general, and emotional self-regulation, in particular, are socialized by parents. Specifically, it appears that effective treatments for externalizing problems in childhood and adolescence may work because they change the way parents manage their own emotional behavior, model emotional self-regulation, and respond to children's regulatory successes and failures.

Unfortunately, research has yet to document that the positive effects of parent training programs on decreases in externalizing symptoms are caused by changes in parental socialization practices that then modify children's emotional self-regulation ability. Process research that is designed to test mediators of treatment response in children and adolescent with externalizing problems is essentially absent from the literature (Shirk & Karver, 2006). Nonetheless, based on common treatment elements for evidence-based treatments, it can be speculated that children and adolescents with externalizing problems benefit from parents who exhibit several changes over the course of treatment, including (a) an increase in modeling of appropriate emotional behavior, (b) improved

use of effective contingencies for appropriate and inappropriate emotional behaviors, and (c) an increase in emotion-coaching behaviors, including providing a balance between support, structure, and guidance when a child expresses an emotion. Future research is needed to determine if such interventions have disorder-specific impact and/or depend on variable etiological pathways (i.e., equifinality).

### Internalizing Problems

Similar to difficulties associated with externalizing problems and anger dysregulation, children and adolescents with internalizing problems exhibit maladaptive patterns of emotional self-regulation when managing depression/sadness and anxiety. For example, research has indicated that individuals experiencing depressive symptoms tend to use more maladaptive regulation strategies and report lower self-efficacy in their emotional self-regulation abilities compared to nondepressed individuals (Aldao, Nolen-Hoeksema, & Schweizer, 2010). Recent research suggests that overly inhibited negative affect is associated with depressive symptoms in adolescence (Eisenberg et al., 1996; Keenan, Hipwell, Hinze, & Babinski, 2009). Further, children diagnosed with anxiety disorders demonstrate lower understanding of emotions (Eisenberg et al., 1996; Southam-Gerow & Kendall, 2000), and higher levels of dysregulated anxiety, sadness, and anger (Suveg & Zeman, 2004) compared to controls. Internalizing symptoms in grades 4 and 5 children has also been found to be higher in children reporting higher levels of dysregulated sadness, less constructive coping with sadness, and more inhibited and dysregulated anger (Zeman, Shipman, & Suveg, 2002). Finally, children with internalizing symptoms are more likely than controls and children with externalizing problems to demonstrate a propensity to experience sadness more frequently and intensely, and display deficient attention regulation abilities (Eisenberg et al., 1996). The empirical link between inhibited emotional expression and internalizing difficulties indicates that, in addition to emotional under-regulation, child psychopathology may also emerge from problems of emotional overcontrol.

Understanding parental socialization practices that contribute to or are associated with youths' emotional inhibition and overcontrol will shed light on the processes underlying the emergence of distinct pathways to different internalizing symptoms of childhood and adolescence. Mounting evidence suggests that parenting may lead to emotional self-regulation difficulties that, place children at risk for developing an internalizing problem through several mechanisms including conversing about emotions, modeling, providing contingencies, and coaching behaviors (for a review, see Zeman, Cassano, Perry-Parrish, & Stegall, 2006).

## Emergence and Maintenance of Emotional Self-Regulation Problems

Throughout childhood, emotion conversations are directly linked to the development of emotional understanding and emotional expressivity (Cassano et al., 2007; Cervantes & Callanan, 1998). Moreover, parental conversations about emotional topics have been shown to be associated with specific emotional self-regulation difficulties that increase the likelihood of experiencing problematic sadness and anxiety management (McDowell, Kim, O'Neil, & Parke, 2002; Suveg, Zeman, Flannery-Schroeder, & Cassano, 2005).

For example, in a study investigating parental emotion socialization in middle childhood, children participated with their parents in a triadic interaction task in which seven situations that are difficult for the child to manage were discussed (McDowell et al., 2002). Dimensions of parental behavior during the task were coded, including positive responses (i.e., encouraging independence, problem-solving help, positive expressivity), emotionality (i.e., intensity of expression, awareness of child's feelings), control (i.e., management of child's emotion), and the degree to which children were described as the cause of the discussed problem. Children's levels of negative emotional reactivity and self-regulation abilities were assessed by asking children to describe how they would express and manage emotions using hypothetical vignettes. The findings revealed unique socializa-

tion pathways as a function of child and parent gender. Specifically, boys' intensity of sadness expression was positively related to fathers' tendency to blame their son for the discussed situation. In addition, boys exhibiting higher rates of dysregulated sadness had mothers and fathers who tended to focus on the son's contribution to the difficult situation. For girls, mothers who exhibited less controlling and more positive expressivity had daughters with more adaptive emotional self-regulation abilities. Maternal positive emotional expressivity was negatively related to girls' maladaptive sadness and anxiety regulation. Girls' dysregulated negative affect was also positively correlated with maternal controlling behaviors and tendency to place blame on their daughter. In addition, girls who reported experiencing more dysregulated anxiety had fathers who were more likely to focus on their daughters' input during the discussion.

In addition to their relation to emotional abilities that contribute to the emergence of internalizing problems, specific parenting behaviors during emotion conversations have also been associated with clinical levels of depression (e.g., Sheeber et al., 2000) and anxiety (e.g., Hudson, Comer, & Kendall, 2008; Suveg et al., 2005) in middle childhood and adolescence. For example, Suveg and colleagues (2005) compared maternal socialization in a group of elementary school-aged children with and without an anxiety disorder. Mothers of children with an anxiety disorder were found to exhibit behaviors that likely exacerbate anxiety problems by being less verbally active (speaking less often than child), using fewer emotion words, and being more discouraging in the emotional discussion compared to mothers of children with no anxiety disorder. In essence, it appears that mothers of anxious children may limit their child's access to a rich source of important information about emotion and emotional self-regulation. Likewise, compared to parents of nonanxious youth, parents of anxious children and teenagers also limit developmental opportunities by being more intrusive during emotion conversations (i.e., not allowing children to manage on their own; Hudson et al., 2008). It may be that the parents of anxious children face emotional regulation challenges of their own when faced with their child's anxiety that then leads them to be intrusive and controlling. In contrast, examination of conversations between mothers and depressed adolescents indicate that mothers may perpetuate tendencies to ruminate when coping with depressed mood by provoking and reinforcing the expression of negative affect (Sheeber et al., 2000).

In addition to socialization pathways defined by the nature of parent–child conversations, parental influence on emotional self-regulation in depressed and anxious youth also occurs through modeling, contingencies, and coaching. For example, several recent studies have documented links between high levels of maternal criticism and expressed maternal negative affect that increase the likelihood of the development and recurrence of depression in adolescence (e.g., Silk et al., 2009; Stocker et al., 2007). Yap, Allen, and Ladouceur (2008) found that mothers of depressed adolescents exhibit frequent invalidation in response to their child's expression of positive affect and this tendency was positively associated with the child's use of maladaptive emotional self-regulation strategies.

Links between maternal meta-emotion philosophy and depressive symptoms in adolescence have also been established. Specifically, a recent study (Katz & Hunter, 2007) assessed mother's meta-emotion philosophy using a structured interview, observed maternal behaviors during a parent–child interaction task, and obtained ratings of adolescents' internalizing symptoms. Findings indicated that mothers who reported being less accepting and expressive of their own negative emotions had children with more depressive symptoms and lower self-esteem. In addition, mothers whose meta-emotion philosophy was characterized as coaching engaged in fewer mutually aversive or dysphoric expressions of negative emotion during the interaction task. Related research suggests that maternal and adolescent meta-emotion philosophies are more highly correlated in depressed compared to nondepressed adolescents, underscoring the importance of this socialization pathway when these children exhibit less adaptive emotional self-regulation (Hunter et al., 2011). Unfortunately, depressed adolescents are more likely than nondepressed adolescents to view parents as rejecting when confronted with an emotional situation (Magaro & Weisz, 2006). As a result, depressed adolescents who are likely to need more support from others are the ones less likely to have access to the benefits offered by a parent who adopts a coaching meta-emotion philosophy.

### Treatment, Emotion Socialization, and Emotional Self-Regulation

Although different in nature and scope than parental involvement in interventions for externalizing symptoms, parents are routinely involved in the treatment of depression and anxiety in middle childhood and adolescence (e.g., David-Ferdon & Kaslow, 2008). Available evidence suggests that parental involvement increases the efficacy of interventions for depression (e.g., Clarke & DeBar, 2003) and anxiety (e.g., Barmish & Kendall, 2005) by modifying parent–child interactions and styles of parental socialization of emotion. Common elements of parent-mediated components of empirically supported treatments include providing education about emotions and emotional development, increasing coaching behaviors in response to children's affect to promote less overcontrolled regulation and more autonomy, and reinforcement of adaptive emotional self-regulation (e.g., Kendall & Suveg, 2006; Stark, Streusand, Krumholz, & Patel, 2010). When successful, parental involvement offers an opportunity to help generalize treatment gains beyond therapy by promoting more adaptive socialization and possibly improving parents' own emotional self-regulation abilities.

In sum, with increasing evidence that parental emotional functioning is strongly associated with treatment outcomes and the course of anxiety and depression problems (e.g., Rohde, Seeley, Kaufman, Clarke, & Stice, 2006; Weersing & Brent, 2003), it follows that parental socialization of emotional self-regulation is intimately intertwined with the developmental psychopathology of internalizing problems in middle childhood and adolescence. As with findings from studies examining families of children with externalizing problems, several mechanisms of parental socialization (i.e., modeling, conversations, contingencies, coaching) appear to influence the continuity and discontinuity of internalizing behaviors by shaping emotional self-regulation.

## PEER SOCIALIZATION OF CHILDREN'S EMOTIONAL SELF-REGULATION

Whereas the majority of the research to date has been on the mechanisms of emotion socialization within the family context, peers also provide an influential context for socialization to occur, which may extend beyond what the family processes contribute to the internalization of emotion self-regulation skills. The theoretical importance of peer relationship influence on children has been well established. Specifically, Harris (1995) suggests that socialization is highly context dependent with in-home and out-of-home behavioral system influence. As children age, they spend more time away from the home environment and, consequently, this system is extremely important in shaping behavior. Just as parents engage in direct and indirect methods of socialization, peers have a variety of salient and oft times harsh mechanisms to influence children's behavior, including teaching, ridiculing, ostracizing, gossiping, and bullying (Harris, 1995). Harris also suggests that group processes of in-group favoritism, out-group hostility, within-group assimilation, and between-group differentiation provide powerful incentives to conform to group norms. Through these processes, peers are hypothesized to create their own norms, values, and scripts about the regulation of emotion (Saarni, 1999). Thus, during middle childhood and adolescence, peers provide a socialization mechanism for guiding emotional expression choices that may result in differing pathways to emotional self-regulation.

Peer relations provide a unique context for emotional self-regulation to develop. Although children's emotion regulation skills are first learned in the family, they do not directly transfer to ways of behaving and responding to emotion in the peer realm; however, emotional self-regulation skills may represent a mechanism by which other skills learned in the family translate into the peer realm (Parke & O'Neil, 1999). Friendships and the peer group are posited to have a substantial impact on children's choices and, specifically, on emotional behavior. This social context is distinctive because it typically consists of similar sociocognitive and moral development, as well as life roles and transitions (Dunn & Hughes, 1998). Peer relations can affect emotional self-regulation through friendship, the dyadic relationship characterized by mutual positive regard, and the broad peer group relationships including acceptance and/or rejection by other children. Research has

established that children highly value peer relations (e.g., Asher & Rose, 1997), and developing adequate peer relations is considered an essential developmental task of adolescence (Simpson & Roehlkepartain, 2003). Thus, it is assumed that children who are competent in emotional self-regulation learn to modify their emotional behavior in accord with the demands of the peer social environment. Consistent with the DP perspective, the relations between peer relations and emotional self-regulation are assumed to be bidirectional. Although there is a rich literature on emotional self-regulation as a predictor of social status and social competence (see Dougherty, 2006, for a meta-analysis), the focus of this chapter concerns the socializing influences of peer relations on emotional self-regulation.

## DEVELOPMENTAL CHANGES AND EMOTIONAL FEATURES OF PEER RELATIONSHIPS

Friendship and peer acceptance have different meanings and functions throughout a child's development. The frequency of peer interaction increases and becomes more complex from toddlerhood through adolescence (Rubin, Bukowski, & Parker, 1998); consequently, the rules concerning the regulation of emotionally expressive behavior in one's peer group also change. From a functionalist perspective, competent emotional self-regulation necessarily involves learning how to respond in a sensitive, yet flexible manner to the social demands of the peer context, no matter how complex or different from the family context, while also meeting personal goals relevant to the situation.

Although dated, Sullivan (1953) proposed a developmental model of peer relations still applicable today that suggested children at different stages of development have unique interpersonal needs. In young childhood, children desire companionship from parents and peers. From ages 6 to 9, acceptance by the peer group is seen as important. Children develop more needs for intimacy with same-sex peers from ages 9 to 12. By adolescence, friendship, based on trust and loyalty, is paramount in predicting adjustment. This model suggests a complex interaction between developmental stage and the nature of peer relations such that younger children seek peer acceptance whereas older children have a need to develop intimacy within friendships. Gender differences are also found, with girls more impacted by friendship and boys by peer acceptance (Rose & Rudolph, 2006).

Guided by Sullivan's theory, Gottman and Mettetal (1986) proposed a developmental model to account for change in emotion regulation within peer contexts. They observed that early childhood is characterized by play activities as long as children are all in agreement but play stops during times of disagreement; thus, emotion goals are to maintain positive affect and harmony in order for play to continue. Middle childhood represents a unique period because the size of the peer group increases, children have contact with peers in many contexts, and there is less supervision. Concern about group acceptance rises and coincides with an increase in cliques and gossip (Parker & Gottman, 1989). Thus, children in middle childhood construct rules for social interaction with same-sex peer groups with the goal of containing overt emotional expression and avoiding embarrassment. Adolescence is marked by the emergence of abstract thinking skills and these evolving abilities are apparent in the scrutiny and processing of emotional events.

It appears that close friendships and peer groups are significant vehicles for promoting or derailing pathways to emotional competence. Within a friendship, children can explore and appraise emotion experiences and support each other by learning new ways to cope with events that elicit strong emotional intensity (Gottman & Mettetal, 1986). The best friend context is thought to provide more supportive processes than those involved in the larger peer group. Specifically, peer groups are posited to apply more rigid rules for maintaining peer norms with potentially severe consequences for emotional misbehavior including ostracism, rejection, and gossiping (von Salisch, 2000). Whereas the mechanisms of influence may be substantially different in each context, it seems clear that friends and peer groups elicit as well as construct guidelines that affect how youth manage complex, intense emotions, and thus guide individual pathways to disorder or adaptation depending on the nature of their experiences.

## PEER EMOTION SOCIALIZATION AND NORMATIVE PROCESSES

### Friendship Processes Affecting Emotional Self-Regulation

Friendship is a close, dyadic mutual relationship with a shared history (Bukowski & Hoza, 1989). It is important to recognize that friendships are not all the same and can be described along a continuum of content, constructiveness, closeness, symmetry, and affective substrates (Bukowski & Hoza, 1989). Zarbatany, Hartmann, and Kankin (1990) had grades 5 and 6 children complete week-long diary measures about their friendships to determine psychological needs and behaviors exhibited within these dyads. From these journals, children reported expecting feelings of inclusion, acceptance, and support from friends. Asher and Rose's (1997) and Rose and Asher's (2004) research indicates friendships are highly valued and vary on at least five dimensions, including respecting equity, providing help, trustworthiness, managing conflict, and public validation and recognition of friendship.

Extant research in friendship indicates that children have a number of expectations and goals for their friendship. Moreover, because maintenance of friendship is a high-priority goal for children, youth need to manage emotions in ways that are sensitive to the demands within this context as compared to other social and non-social contexts. Important questions regarding how friendships affect emotional self-regulation in comparison and in combination to other close dyadic relationships (e.g., parents, siblings) as well as larger peer dynamics (e.g., social status, peer group) remain to be answered.

Children must learn to monitor and modify their emotional responses to produce and maintain interpersonal rewards from their friendships. Research indicates that socially competent children are keenly aware that their emotional expression affects others and subsequently will alter their emotional expression based on contextual cues and their expectations about the outcomes of emotional expression. For example, Zeman and Shipman (1997) investigated grades 2 and 5 children's reasons for expressing or masking emotions of sadness, anger, and pain and found that children were more likely to conceal emotion in the context of interactions with friends compared to those with parents. Further supporting the notion that friendship provides an important context for emotional self-regulation, Asher and Rose (1997) examined the skills required for friendship in grades 4 and 5 children. Results revealed that children who used strategies of compromise, espoused relationship goals, and realized the effect of their emotions on others had the least conflict and enjoyed higher quality friendships.

The features that characterize high-quality friendships are also those that facilitate the development of emotional self-regulation. Friendships have unique qualities in that children know each other better, have different expectations, have a more favorable affective climate to explore and problem solve, and seek ways to resolve problems compared to non-friends (Newcomb & Bagwell, 1995). Hartup (1999) used a competitive game task with school-age children and found that friends engaged in more conflict and had disagreements that lasted longer than non-friends. Further, using vignettes that described a conflictual situation, children reported a stronger sense of violation, more complex emotions, and being more likely to use direct behavioral strategies and take responsibility if the child were a friend than non-friend. In a series of studies in which friends worked together on a project or completed it alone, friends had more extensive exploration, more positive emotional exchange, and recalled the activity better than those who worked alone. It appears that through this stronger affective context, friendship encourages growth in emotion regulation skills through problem solving, cooperation, and understanding one's effect on another (Hartup, 1996).

Similarly, a study on adolescent friendship found that friends, in comparison to acquaintances, were more likely to give each other the benefit of the doubt in an ambiguous situation; moreover, the relationship context colored the emotional experience of the participant. Specifically, when the youth imagined a friend in the scenario, they were more likely to take some of the responsibility for the conflict, felt more violated, reported experiencing more complex and varied emotions, and took

greater steps to repair the situation when compared to their responses when the participant was a classmate (Whitesell & Harter, 1996). Providing further support for the distinctive context of friendship, Parker and Gottman (1989) found that expression of emotion differed between friends and non-friends with friends showing more affective reciprocity, emotional intensity, and emotional understanding. Thus, the intimacy and development of the friend relationship provides a unique opportunity for the elicitation of strong emotion and exploration of how to manage such intensity, which in turn facilitate the growth and extension of self-regulation skills.

In addition to affective environment differences, von Salisch and Vogelgesang (2005) argue the importance of learning to negotiate anger expression as constituting a crucial task in friendship. In their sample of youth ranging from middle childhood age to adolescence, results revealed that, with age, children used negotiation strategies to manage anger in friendship and declined in the use of aggressive and distancing strategies. These studies demonstrate that friendship and its intimacy provide a salient context for the expression and control of emotion. Further, it illustrates how children's goals to preserve the friendship are centrally prominent and guide their emotional self-regulation efforts, consistent with the tenets of a functionalist perspective.

There is very little research on the mechanisms of how children's friendships help them cope with emotional events or shape their emotional behavior. Mutual emotion socialization is hypothesized to occur by children modeling emotional behaviors for friends while receiving differential reinforcement (Hartup, 1996); however, research supporting this process is scant. Denton and Zarbatany (1996) investigated support processes in a developmental sample ranging from pre-adolescents to adults. Their results revealed that all participants felt better when they discussed emotionally eliciting events with a close friend; however, the process of support was different at each age group. Preadolescents appeared to depend primarily on distraction, whereas adolescents also used distraction but began to use more adult-like strategies (e.g., validation, co-constructing reality), but frequently missed opportunities to use such strategies. Adults primarily utilized validation, reality co-construction, and checking for accuracy and understanding. This cross-sectional study revealed important information about developmental differences.

Erdley and colleagues (2009) examined the types of emotion regulation strategy used by friendship dyads of children in grades 1 to 4 during an emotion discussion task. Mutually nominated same-sex and -grade friends were asked to discuss a recent emotion-eliciting situation. Results revealed that, with respect to anger, younger boy dyads were more dismissive than younger girls, whereas younger girls facilitated the emotion discussion more frequently than younger boys. Regarding sadness, younger boys utilized more dismissive responses compared to younger girls. Additionally, older children uttered more validating, supportive comments in response to their friend's disclosure of sadness than younger children. Overall, the results demonstrate children's responses are sensitive to emotion type and change based on the characteristics (e.g., age, gender) of the child. These two studies reveal important aspects of emotion coping that occur in the friendship process and how friends may shape emotional behavior.

Studies are sorely needed to understand the process underlying mutual emotion socialization in friendship given that research indicates that children do report using different expressive strategies dependent on the nature of their relationship with their social partner. Further, there is rich theoretical base that purports that some children manage their emotions in ways that lead to adaptive outcomes whereas other children are not as successful in self-regulating their emotions, which predicts to poorer social outcomes (Halbertstadt, Denham, & Dunsmore, 2001); however, the role of friendship in the pathways to healthy emotional self-regulation have not been empirically enumerated.

## Peer Group Processes Affecting Emotional Self-Regulation

A number of peer group processes are hypothesized to have powerful influence on children's management of emotion. Peer rejection and victimization is a process that is linked with adverse social and emotional outcomes for children (Parker & Asher, 1987). Consequently, researchers have

examined emotion regulation processes of children who have been rejected by their peers. Underwood and colleagues (Galen & Underwood, 1997; Underwood, Hurley, Johanson, & Mosley, 1999) found that elementary, middle, and high school children of all social statuses (i.e., rejected, neglected, average, popular, controversial) reported masking positive and negative emotional expression, with more emphasis on inhibiting negative emotion in the context of the peer group. With increasing age, children dissembled positive emotion more and increasingly were openly expressive of anger and disappointment. Interestingly, their results revealed that boys increasingly masked anger with age, whereas older girls did not conceal their anger as much as younger girls.

In a game context that was rigged to make children lose, rejected status children made more negative gestures, and rejected status boys begged and pleaded for the confederate to let them win, indicating poor emotional self-regulation. Hubbard (2001) conducted similar research that yielded consistent results: rejected status children made more facial displays and verbalizations of anger during a game than children in other sociometric groupings. Interestingly, rejected status children were observed to display more nonverbal indicators of happiness (e.g., cheering, clapping hands, dancing) during times when they were winning. Hubbard suggests that these displays of positive affect may be inappropriate or excessive in that context and reflect gloating. Consequently, this expression of positive emotion may influence the way in which children view the rejected child and could reflect a lack of social perspective taking on the rejected child's part, given that his or her behavior may not be viewed as good sportsmanship by the play partner. These studies were cross-sectional, and thus the direction of effects or potential bidirectionality between emotional self-regulation and sociometric status cannot be determined. However, this research does provide important information regarding the emotional self-regulation deficits that are present in children who are not viewed favorably by their peers.

## GENDER DIFFERENCES IN PEER RELATIONSHIP PROCESSES

Rose and Rudolph (2006) proposed a comprehensive peer socialization model to aid in the explication of gender differences observed in peer relations research. Gender segregation, a robust phenomenon occurring as early as preschool and throughout the middle childhood years, provides markedly distinctive socialization experiences for boys and girls (Maccoby, 1998) and sets the stage for sex-typed peer relationship processes. These gender-specific peer relationship processes may influence emotional and behavioral development, partially explaining observed gender differences. The authors contend that these processes place girls at risk for developing internalizing problems and inhibiting externalizing problems, whereas the characteristics of boys' peer relationships place them at risk for externalizing problems and protect against internalizing problems.

There is support for gender-specific emotion socialization that suggests girls suppress anger whereas boys inhibit sadness due to the perception of less support for nonstereotypical expression. Specifically, when children are asked about their expectations for emotional expression, boys expect negative consequences for expressing sadness to their friends, whereas girls expect support for sadness and negative consequences for expressing anger (Perry-Parrish & Zeman, 2011; Zeman & Shipman, 1997). Moreover, specific to friendship relational processes, girls' friendships have been observed to be more intimate and rely on disclosure of personal information. Paradoxically, this very feature also results in fragility as this information often is disclosed and results in difficulty or ending of the friendship (Benenson & Christakos, 2003). Whitesell and Harter (1996) examined gender differences in the reactions of young adolescents using anger-provoking hypothetical situations including best friends or classmates. Results demonstrated that girls felt more violated and increased negative emotions when the transgression occurred with a friend. Boys, in contrast, did not view name calling as much of a violation and some responded back with name calling to lighten up the situation. Socialization influences are frequently proposed as an explanation for these gender differences, but few studies have evaluated the ways in which peer social pressures may influence children's emotional self-regulation abilities and related psychosocial outcomes.

## PEER EMOTION SOCIALIZATION AND ATYPICAL EMOTIONAL SELF-REGULATION PROCESSES

### Externalizing and Internalizing Problems

In a recent prospective longitudinal study, Kim and Cicchetti (2010) examined the bidirectional relationship between emotion regulation, psychological problems, and peer rejection in a mixed sample of typically developing children and those who had a maltreatment history. Their results revealed that children who were better at self-regulating emotions were more likely to better accepted by peers and were protected from internalizing symptoms 4 and 7 months later, after controlling for prior functioning. In contrast, a different pathway was detected for the relations among emotion regulation, peer relations, and externalizing problems. An indirect relation between emotion regulation and later peer rejection was mediated through concurrent and later externalizing problems. Thus, adaptive emotional self-regulation may facilitate abilities to establish positive peer relationships and consequently mitigate risk for internalizing problems, whereas maladaptive emotion regulation places children at risk for externalizing behaviors and raises the likelihood of subsequent or concomitant peer rejection.

Similarly, McLaughlin, Hatzenbuehler, and Hilt (2009) examined the relationship between victimization, emotion regulation, and internalizing problems in a racially diverse sample of adolescents using three time points (baseline, 4, and 7 months later). Peer victimization was associated with increases in emotion dysregulation. These increases in dysregulation mediated the relations between relational victimization and changes in internalizing symptoms longitudinally. Interestingly, these authors also found a bidirectional relationship between internalizing symptoms and relational victimization; however, emotional dysregulation did not mediate the pathway from internalizing problems to victimization. These two studies underscore the importance that peer relations have for helping youth hone their emotion self-regulation skills. Further, experiences like victimization deprive youth of supportive environments in which to learn how to manage emotions adaptively and place them at risk for psychological maladjustment, particularly for internalizing problems.

The scope of research directly related to peer processes and emotional self-regulation is limited. One could hypothesize that homophily, the idea that peers are attracted to those with the similar behavioral characteristics and these characteristics become increasingly similar over time, is applicable to emotional processes as well (e.g., Cairns, Xie, & Leung, 1998; Espenlage, Holt, & Henkel, 2003).

In conclusion, there are many convincing reasons to believe that peer socialization contributes significantly to emotional self-regulation and the internalization of self-regulatory mechanisms. First, children spend increasing amounts of time with their peer group as they develop. Second, children highly value this time and have clear goals and expectations regarding their friends and peers. Third, extant research supports the notion that children are aware of the opportunity to influence one another, that emotion regulation affects their peers and their relationship with them, and that, in certain social contexts, it may be wise to dissemble emotional expression given its influence on others' emotions, thoughts, and behaviors. Because of these factors, there is little doubt that exposure to other children contributes to one's developing emotional capabilities. That said, there is a need to describe and understand these processes, how they operate, and their influence on peer interactions. Delineating the pathways from adaptive emotional self-regulation within peer contexts to adaptive social functioning and its converse remain areas requiring substantive empirical attention.

## CONCLUSIONS

It is evident from the review of the extant literature that parents and peers continue to exert important emotion socialization influences on children's and adolescents' developing abilities to self-regulate

their emotions. Although the nature and extent of these effects differ from those in early childhood, the continuing influence of parents and the increasing impact of friends and the peer group guide how children learn to express and manage their emotions in accord with the increasingly complex demands of the social environment and their personal goals. The DP framework offers an integrative way to frame the findings of this emerging literature such that pathways to adaptive and maladaptive functioning (e.g., externalizing, internalizing behaviors) continue to be delineated based on the mechanisms of influence (e.g., methods of emotion socialization) interacting with individual differences (e.g., gender, age) and prior adaptation (e.g., history of emotion regulation development). Further, understanding the antecedents, markers, and outcomes of different emotion socialization behaviors provides insights into the continuity of emotional self-regulation efforts that initially originate from regulation through external sources to the transition of self-guided attempts to manage emotion arousal and experience.

Although the field of study regarding children's emotion processes, including emotional self-regulation, is strengthening, inquiry into these processes during middle childhood and adolescence lags substantively behind research conducted with younger age counterparts (Adrian, Zeman, & Veits, 2011). As such, there are numerous avenues of investigation that are sorely needed to complement and expand the current base of knowledge. First, there is a need for observational and longitudinal research to examine the role of biological factors (i.e., temperament) as they interact with environmental factors (e.g., family socialization). Second, the role of other sources of influence (e.g., peers, teachers, coaches, grandparents) needs to be investigated further. It would be interesting to examine parental socialization processes in families with non-traditional parents (e.g., stay-at-home fathers, single parents, GLBT parents) to determine whether the nature of caregiving responsibilities, interaction styles, relationship/attachment quality, biological sex, and/or other factors are critical to socialization effects on children's emotion self-regulation skills. There is little research examining the role of siblings in the socialization of emotional expression, yet intuitively one would expect that they play a significant and enduring role in this domain. Within the peer domain, more research is needed to delineate the precise mechanisms of how friendship and peer relations individually and conjointly shape children's ability to regulate their emotions.

Third, research examining periods of transition (e.g., transition to middle school, to high school, to parental separation) that may introduce vulnerability to children is needed and can provide potentially important insights into which emotional self-regulation skills may be affected by these stressors, and which skills may serve as protective factors. Fourth, from a DP perspective, it is important to examine specific aspects of emotional self-regulation processes and their predictive relations to specific forms of disorder (e.g., poor self-regulation as evidenced by emotional lability and poor emotional awareness associated with borderline personality disorder). Intervention research can then use these findings to design treatments to ameliorate maladaptive emotion processes as well as devise prevention strategies to modify or alter the trajectory that leads individuals to these atypical outcomes. For example, research is needed to examine the relations between socialization efforts and emotional self-regulation abilities in children with ADHD, a disorder characterized by deficient self-control in many domains, including difficulty regulating both positive and negative affect. Relatedly, detailed process analyses are needed to determine if parent-mediated interventions change parent behavior and if this behavior change leads to advancements in children's emotional self-regulation.

Finally, increased understanding of emotion processes as a function of ethnicity is needed, as cross-cultural research can highlight both similarities and differences in approaches to the socialization of emotion regulation and self-regulation. The role of culture and context is paramount to both the functionalist and DP perspective, and, without taking these influences into account when conducting emotion regulation research, our understanding of how children's emotions are socialized by parents and peers and lead to the development of emotional self-regulation is incomplete.

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