# The double-edged sword: Emotional regulation for children at risk

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## Abstract:
The capacity to manage emotion is based on the growth of self-regulatory capacities in the early years, but is also affected by situational demands, influences from other people, and the child's goals for regulating emotion in a particular setting. For most children growing up in supportive contexts, the growth of emotional regulation is associated with enhanced psychosocial well-being and socioemotional competence. But for children who are at risk for the development of psychopathology owing to environmental stresses or intrinsic vulnerability (or their interaction), emotional regulation often entails inherent trade-offs that make nonoptimal strategies of managing emotion expectable, perhaps inevitable, in a context of difficult environmental demands and conflicting emotional goals. This analysis discusses how emotional regulation in children at risk may simultaneously foster both resiliency and vulnerability by considering how emotion is managed when children (a) are living with a parent who is depressed, (b) witness or experience domestic violence, or (c) are temperamentally inhibited when encountering novel challenges. In each case, the child‚s efforts to manage emotion may simultaneously buffer against certain stresses while also enhancing the child's vulnerability to other risks and demands. This double-edged sword of emotional regulation in conditions of risk for children cautions against using "optimal" emotional regulation as an evaluative standard for such children or assuming that emotional regulation necessarily improves psychosocial well-being. It also suggests how the study of emotional regulation must consider the goals for regulating emotion and the contexts in which those goals are sought.

## Article:
Emotions are complex phenomena. They entail constellations of physiological arousal, cognitive appraisal, and expressive activity that interact with situational demands and cultural rules to create subtly nuanced, richly variable subjective and behavioral events. Individual differences in emotion are also multifaceted, fashioned from the interaction of organismic (e.g., temperamental) characteristics, experiential history, construals of oneself and the situation, and the personal goals that shape emotional arousal and its expression. Consequently, although emotion has its roots in the legacy of biological adaptation, it also reflects some of the most sophisticated features of human social cognition, self-understanding, and strategic functioning.

It should be no surprise, therefore, that emotional regulation is a complex phenomenon. Although strategies of emotional self-regulation originate in the young infant's simple efforts to cope with distress through self-soothing, they quickly become integrated into a network of

behavioral strategies by which children (and adults) seek to maintain personal well-being, manage their relations with others, behave consistently with their self-image, manage their self-presentation to the social world, and achieve a variety of other goals. And because developing strategies of emotional regulation build on the complex physiological, cognitive, and expressive features of emotion itself, these strategies can alter emotional experience in a remarkable variety of ways (Thompson, 1990, 1991, 1993, 1994).

When emotion and emotional regulation are viewed in the context of risk for the development of psychopathology, their complexity is further underscored because of the challenges posed by atypical developmental pathways (Thompson, Flood, & Lundquist, 1995). For Down syndrome children whose physiological characteristics undermine their capacities to modulate arousal, for example, emotional signals may be more subdued and emotional regulation may be limited because of neurophysiological challenges as well as cognitive retardation (Cicchetti & Sroufe, 1978; Emde, Katz, & Thorpe, 1978; Thompson, Cicchetti, Lamb, & Malkin, 1985). For mal-treated infants and children who experience markedly inconsistent, insensitive, and sometimes abusive care, the expression of emotion and the need to regulate emotion may become part of their complex strategies for managing interactions with caregivers, and of eliciting nurturance while avoiding harm (cf. Cicchetti, 1990; Cicchetti, Ganiban, & Barnett, 1991; Gaensbauer & Sands, 1979). For aggressive boys who tend to construe hostile intent in superficially benign social encounters with peers, problems of emotional regulation may both arise from and contribute to their impaired social skills (Dodge, 1991; Dodge & Somberg, 1987; Graham, Hudley, & Williams, 1992; Thompson, 1994). In each of these cases, and others, a developmental psychopathology perspective highlights how avenues to emotional regulation are forged from the multifaceted interaction of individual strengths and vulnerabilities, socialization processes, situational demands, personal goals and beliefs, and the variety of other factors that contribute to emotional arousal and its management by developing persons.

An appreciation of the complex determinants of individual differences in emotional regulation is important not only for a sensitive understanding of the origins of these differences in typically developing and atypical populations. It is important also for appreciating why, in situations that contrib ute to the risk of psychopathology, strategies of emotional regulation can enhance resiliency as they do in typical children, but they may also enhance vulnerability to further harm, sometimes at the same time. In other words, emotional regulatory processes not only provide buffers to psychosocial stressors (as they are usually conceived), but they may also leave children vulnerable to other risks, especially in circumstances that pose challenges to normal sociopersonality growth. Our goal is to elucidate this dual quality of emotional regulation by considering the nature of emotional regulation and the factors contributing to individual differences in self-regulatory strategies in various populations of at-risk children.

### *What Is Emotional Regulation?*
The view that emotional regulation may provide both strengths and vulnerabilities in the context of risk for the development of psychopathology is surprising, especially in a culture that values emotional self-control and its links to social competence, cognitive performance, and the management of stress. Moreover, the conceptual associations between individual differences in emotional self-management and a variety of desirable personality characteristics (e.g., ego control, emotional stability, agreeableness, etc.) suggest that the development of a broad

repertoire of strategies of emotional self-regulation contributes significantly to healthy personality growth. Although this is likely to be true for most children, when the concept of "emotional regulation" is conceptually unpacked, it becomes more apparent how conditions of risk can make the psychosocial outcomes of emotional regulatory strategies less certain.

One of us (Thompson, 1994; Thompson et al., 1995) has proposed the following definition of emotional regulation:

Emotion regulation consists of 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)

There are several features of this definition that require elaboration. According to this portrayal, emotional regulation includes both intrinsic and extrinsic influences — that is, emotions are not only self-regulated, but they are also managed by others. The latter is most apparent early in life, when caregivers devote considerable energy to regulating the emotions of offspring by comforting distress, inducing positive feelings, managing emotional demands upon children, altering children's emotionally relevant constructions of events (such as through social referencing), and later by direct instruction about the need for emotional self-management, and how to do it (cf. Thompson, 1990, 1991). Moreover, emotions are influenced throughout life by others who provide sympathetic support, induce guilt, use humor in difficult circumstances, alter emotion-relevant appraisals through advice, counseling, and other means, and otherwise manage emotional arousal, especially in the context of close relationships. The importance of the extrinsic management of emotional life is particularly apparent when people seek the assistance and support of others in emotionally arousing circumstances, whether this is seen in the secure-base behavior of young infants in stressful circumstances or the social support provided by friends and relatives during a divorce or death of a family member. Because emotions are both self-regulated and managed by others, however, these influences may not always be in synchrony. At times, for example, caregivers may (sometimes inadvertently) seek to alter a child's emotional experience or appraisals in ways that are inconsistent with the child's own emotional appraisals or goals. They may also impose emotional demands on offspring that require management in ways that are beyond the developmental capacities of children or that leave offspring vulnerable to other kinds of psychosocial dysfunction.

Another feature of this definition is that emotional regulation is portrayed functionally — that is, in terms of the person's goals for a particular situation. Indeed, it is difficult to conceive of emotional regulation except with relation to its functional ends; different strategies of emotional regulation may be used in different (or the same) circumstances to accomplish various goals. Implicit in this portrayal of emotional regulation is that emotions are managed for many reasons. These may include striving to maintain a positive disposition in oneself or another, but strategies of emotional regulation may also be enlisted for self-defense (such as when children enhance their anger and manage fear to stand up to a bully), maintaining good relations (such as when children control feelings of anger in aggressive or humiliating encounters to foster cordiality with an older child or an adult), obtaining assistance and support (such as when distress is enhanced in the company of nurturant companions), strengthening self-esteem (such as when negative emotions are controlled in the presence of respected individuals), or for other reasons. As these examples suggest, emotional regulation may entail managing the expression of emotion

(commonly studied in terms of children's knowledge of the display rules of emotion; see Saarni, 1989) as well as underlying feelings. Often these alternative targets are not easily distinguished. Children and adults may, for example, seek to manage the expression of anger, fear, or distress to regulate their underlying feelings.

The multiplicity of possible goals to be accomplished in any situation requiring the management of emotion makes the process of emotional regulation potentially quite complex. It is important to recognize, furthermore, that many circumstances entail more than one goal in the management of emotion, and these goals may impose inconsistent demands on regulatory skills. A child who has been threatened by a playmate, for example, may experience conflict between managing emotion to enlist the assistance of others (by freely expressing fear and distress and even enhancing their expression), defend oneself (by controlling fear and enhancing feelings of anger and indignation), avoid aggression (by controlling feelings of anger and distress), or to achieve other aims. Likewise, a child who has been wronged by another may experience conflict between regulating emotion to restore amicability (by controlling feelings of anger), ensure justice (by enhancing anger expressions), obtain support (by expressing distress and managing feelings of anger), or to accomplish other goals. The implicit choices among these goals depends on the child, the situation, the child's relationship with the target of their arousal, and the goals and values of others (especially socialization agents). Furthermore, each of these immediate goals has long-term consequences; thus there may be further dissonance between the emotional management strategies entailed in accomplishing various short-term and long-term goals (such as avoiding further threats or harm).

A third feature of this definition is that emotional regulation includes monitoring and evaluating emotional experience as well as modifying it. In this sense, the appraisal of one's emotional state, and reactions to this appraisal, constitute part of the process of emotional regulation. Although we know little about how children perceive the cues of visceral arousal (e.g., escalating heart rate, increased blood pressure, perspiration, shortness of breath) and the cognitive states (e.g., confusion, biased information processing) that accompany emotional arousal, it is probably safe to conclude that experiences of emotional arousal are highly salient to children. But is also clear that children vary in the relative salience of their emotional arousal. Temperamentally inhibited infants and young children, for example, may engage in fairly persistent and systematic emotional self-appraisals because of their low thresholds for arousal, which may not be true of children who are temperamentally uninhibited. Children in conditions of risk may also become acutely self-monitoring, especially when the cues associated with their own emotional arousal have become conditioned to other events that are meaningful to them because these events are aversive, threatening, or overwhelming, such when children are victims of abuse, regularly witness extreme marital conflict, or must assist a depressed or chronically anxious parent.

In these circumstances, processes of emotional regulation are likely to be focused on the appraisal of one's emotional condition and the internal and external cues anticipating emotional arousal because of their importance to the management of negative arousal. Additional elements of emotional self-control are likely to be devoted to appraising and monitoring the emotional conditions of others, especially as they have significant implications for one's own wellbeing. Indeed, appraising another's emotional state may be essential to emotional self-regulation if children learn that one of the best ways of altering their own unpleasant emotional experiences is

to alter another's emotions, whether this requires comforting a distressed parent, averting anger in an adult, or modulating the stimulation provided by a demanding or overintrusive caregiver.

A fourth aspect of this definition of emotional regulation is that managing emotion may entail maintaining or heightening emotional arousal as well as inhibiting it (see also Masters, 1991). Although we most commonly consider emotional regulation in the context of dampening experiences of negative arousal, it is also true that individuals sometimes act to heighten their negative feelings, such as when children "feel sorry for themselves" by ruminating on their sadness, or intensify their feelings of anger to confront a bullying peer or an indignant parent (cf. Miller & Sperry, 1987). Of course, strategies of emotional management are also enlisted to maintain and heighten experiences of positive arousal, such as during parties and other group activities or (for adults) in sexual relations. An important consideration in studying at-risk developing populations, however, is how (intrinsic or extrinsic) strategies of emotional management may contribute to heightening negative arousal in children when the consequences of doing so are aversive rather than desirable for the child. That is, in conditions of environmental risk, or owing to temperamental vulnerability, emotions may become regulated in ways that leave children with persistent feelings of sadness, anger, or anxiety.

Finally, this definition of emotional regulation emphasizes not only strategies for managing the discrete emotion that is aroused by circumstances, but also its temporal and intensive characteristics. Indeed, strategies to diminish (or accentuate) the intensity of an experienced emotion, slow (or accelerate) its speed of onset or recovery, limit (or enhance) its persistence over time, reduce (or increase) emotional range or lability, or influence other qualitative characteristics of emotion are likely to be used far more commonly, and with greater efficacy, than are strategies to alter the discrete emotion itself (such as by changing anger to sadness or happiness). Furthermore, altering the intensity or temporal course of an emotional response may better accomplish the functional goals of emotional regulation than managing the discrete emotional tone, whether this involves strategies for suppressing the intensity of fear experienced in novel or challenging situations, reducing the persistence of feelings of anxiety in academic settings, or slowing the rise time of anger in response to peer provocations that may be misinterpreted. As a consequence, studies of emotional regulation — especially concerning atypical populations — should wisely focus on the quality of emotion as well as its valence and tone.

It is important to note that this portrayal of emotional regulation does not make a sharp distinction between strategies that are enlisted to manage the underlying subjective experience of emotional arousal, and strategies that are used to alter one's display of emotion to others, as earlier noted. The reason is that the difference between regulating emotion and its display is not always so clear. As self-perception theory argues, individuals sometimes manage their feelings by acting in a discordant manner, such as behaving casually during fearful events. Conversely, acting consistently with cultural rules for emotional displays requires, at times, managing underlying arousal, such as during funerals or other formal gatherings. These connections between feelings and their expression argue against a strong distinction between skills of emotional management and the ability to regulate emotional displays. Many times, especially for children, they are closely related.

This definition provides a fairly complex portrayal of a phenomenon that initially seems simple and straightforward. But its complexity suggests that in many situations, the process of emotional regulation is neither easy nor necessarily straightforward. Particularly in conditions of risk for developing psychopathology, children may encounter circumstances in which different but meaningful goals for regulating emotion compel different behavioral strategies (such as intervening vs. fleeing witnessed episodes of domestic violence), or in which their goals for managing emotion are different from the emotional demands imposed by caregivers (such as what the offspring of a depressed, guilt-inducing parent may experience). They may also encounter circumstances in which the outcome of appraising and monitoring one's own ambient emotional state, or another's emotions, creates anxiety or distress (such as what the son or daughter of an alcoholic parent may experience) or situations in which one's personal threshold of arousal makes it especially difficult to regulate emotion (as may occur for children who are temperamentally inhibited). These suggest ways that processes of emotional regulation can enhance resiliency and also vulnerability, sometimes at the same time.

## Fostering Resiliency and Vulnerability

The research literature in the field of developmental psychopathology includes many examples of how children at risk acquire strategies for managing their emotions, or their emotional display, in ways that protect them from many challenges in their constitutional or environmental circumstances, but leave them vulnerable to other risks. Like classic portrayals of defensive processes within psychoanalytic theory, they purchase relief from certain psychosocial demands, but often at a cost. In this section, we profile two conditions of environmental risk—when children are in the care of a depressed mother, and when children witness or are victims of domestic violence—and one of constitutional risk — when children show a particular temperamental vulnerability.

### Offspring of depressed mothers

Consider what it is like to grow up with a parent who is depressed, or has a bipolar disorder (see Garber, Braafladt, & Zeman, 1991; Radke-Yarrow, Belmont, Notelmann, & Bottomly, 1990; Susman, Trickett, Iannotti, Hollenbeck, & Zahn-Waxler, 1985; Zahn-Waxler, Cole, & Barrett, 1991; Zahn-Waxler & Kochanska, 1990). A depressed mother presents her offspring with compelling emotional demands and forceful messages affecting children's interpretations of those demands. Children of depressed caregivers encounter a mother who manifests a great deal of sad emotion, together with irritability, helplessness, and guilt displayed in her interactions with her offspring (Zahn-Waxler et al., 1991). Depression is also often accompanied by marital conflict in the home, which exacerbates the emotional demands on offspring (Downey & Coyne, 1990). In the context of this emotional climate, moreover, depressed caregivers act in ways that enhance children's sense of guilt and responsibility for the adult's depression (see Zahn-Waxler & Kochanska, 1990). Depressed adults commonly use their offspring as sounding boards for their own despair and negative feelings, which they sometimes blame on the children themselves. Depressed parents have high expectations for the behavior of offspring, they can be demanding and critical, and they often induce guilt through the use of love withdrawal and other techniques (Susman et al., 1985). In addition to these demands, children are exposed to compelling models of a negative attributional strategy: one that mingles perceptions of personal responsibility with feelings of personal helplessness (cf. Garber et al., 1991). Children are likely to internalize these messages, and this may contribute to their becoming caught up in their

parents' emotional struggles and experiencing undue responsibility for their parents' emotional problems. Even in infancy, the children of depressed mothers may become insecurely attached and show other signs of psychosocial dysfunction (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985; ZahnWaxler, Cummings, Iannotti, & RadkeYarrow, 1984).

How do young children learn to manage their own emotion in caregiving circumstances such as these? The evidence paints a dismal picture of deficits in emotional regulation. The school-aged offspring of depressed mothers tend to be less effective in managing their emotions than are the offspring of nondepressed mothers, and they also tend to lack confidence in their ability to regulate their arousal (Garber et al., 1991). When they can think of strategies for managing emotion, these strategies often consist of avoidance or negative behaviors (like aggression) that may have unexpectedly unfortunate consequences for the child, rather than more constructive, problem-focused strategies. This suggests that the helplessness that often accompanies depression in adults is mirrored in the limited confidence of offspring in their own capacities to manage their feelings (Garber et al., 1991). Offspring may thus themselves become preoccupied with negative emotion, and they are susceptible to depressive disorders (Cole & Kaslow, 1988; Cummings & Cicchetti, 1990; Miller, Birnbaum, & Durbin, 1990).

The problem is not that the offspring of depressed mothers do not try to cope with the emotional demands of their caregivers, but rather that their capacities to do so are impaired, in part, by conflicting and inconsistent goals and strategies for emotional self-regulation. For these children, efforts to manage emotion may be oriented toward accomplishing any of several outcomes: maintaining a stable feeling of wellbeing, avoiding further critical reactions or rejection from the parent, defending oneself against unfair accusations or unreasonable expectations, anticipating the next difficult encounter with the parent, or perhaps also trying to manage the parent's emotional state to protect his or her own. These goals can lead the child in inconsistent directions. Avoiding a depressed parent may be helpful for preserving feelings of personal well-being, for example, but may accomplish little for self-defense and does nothing to improve the parent's ongoing emotional condition. In fact, it may exacerbate the parent's distress or animosity. Alternatively, angrily confronting a sad but hostile parent may help to safeguard self-esteem but foster an angrier home environment and, thus, contribute to personal feelings of guilt and responsibility for the parent's emotional condition. Consequently, these children often seem caught in a complex web of taxing emotional demands and inconsistent goals for emotional self-regulation for which there are no optimal strategies for managing their feelings.

There is some evidence that in such circumstances, the offspring of depressed parents become hypervigilant to cues from the parent of impending distress or conflict (Zahn-Waxler & Kochanska, 1990). A heightened sensitivity to the parent's ongoing emotional state can be protective as it enables the child to anticipate and prepare for difficult encounters with the caregiver or between parents in the home. As we shall see, hypervigilance is a regulatory strategy observed in children who experience other kinds of domestic difficulty. However, hypervigilance can exact an emotional cost, particularly as it sensitizes the child to negative affect, and it may foster an overreaction to conflict when it actually occurs.

More significantly, there is also evidence that the young offspring of depressed mothers show enhanced capacities for empathy as they try to provide helpful assistance to their mothers, and

they are commonly observed intervening prosocially and with problem-solving initiatives when their mothers are expressing distressed emotion (Garber et al., 1991; Zahn-Waxler & Kochanska, 1990). In a sense, their goal is to provide helpful assistance to their caregivers to relieve the adult's depressed affect and, thus, reduce their own stress. Furthermore, this style of interaction also generalizes to other social partners. In one study, the young offspring of depressed mothers treated playmates with greater politeness and appeasement and showed less negative emotion, compared to a group of children of nondepressed mothers (Zahn-Waxler et al., 1984; Zahn-Waxler & Kochanska, 1990). As summarized by these researchers, children who had grown up with a depressed parent had "learned to treat others carefully" (Zahn-Waxler & Kochanska, 1990, p. 227).

Intervening to support, manage, and improve the emotional condition of a parent is, on one sense, a sophisticated strategy for coping with the emotional demands imposed by a depressed caregiver. To the extent that such efforts are successful, they can help to reduce the stresses the child experiences directly from the parent's sad affect. They can also strengthen the child's perceived competence in coping with a difficult family situation. More commonly such efforts are unsuccessful, however, because of the limited repertoire of interventions that most young children are capable of, as well as the complex origins of depressive disorders in adults. In these circumstances, the risk to the child is that by assuming undue responsibility for the parent's emotional state, the child may become burdened by inappropriate feelings of guilt for failing to manage depressive distress in the adult. The child then may become further involved in the parent's ongoing emotional condition (Zahn-Waxler & Kochanska, 1990). Furthermore, young offspring may generalize these management strategies to their encounters with others, becoming unusually solicitous of others' feelings, but also feeling unduly responsible for their well-being.

The potential benefits and vulnerabilities of offering emotional support to a depressed parent as a mode of emotional regulation are evocatively illustrated in a recent study by Radke-Yarrow, Zahn-Waxler, Richardson, Susman, and Martinez (1994), who observed the young preschool offspring of depressed and nondepressed mothers during procedures in which mothers displayed sad emotion while looking at a picture book. These researchers rated the child's care and helpful assistance to the parent during these episodes. Measures of the child's security of attachment to the parent and of the child's broader emotional problems were also gathered. Radke-Yarrow and her colleagues found that children varied significantly in the amount of care they showed toward their mothers during the picture-book observations, with some children conveying greater amounts of verbally expressed sympathy or concern, physical comforting, and other forms of assistance than others. The children who showed the greatest amounts of care, however, were distinguished by a constellation of characteristics: living in a home with a severely depressed mother, being securely attached to this caregiver, and having emotional problems of their own. These were the children who were, in other words, most emotionally needy, but most likely to become emotionally involved in the mother's ongoing affective state. For such children, offering care and support to a depressed parent may be the most effective (perhaps the only) way of coping constructively with the emotional demands of a caregiver who is sad, hostile, and guilt inducing. But the child's empathy and expressions of care pose significant risks as well, especially for continued preoccupation with the parent's affective turmoil. The generalization of this socioemotional style with others may foster long-term deficits in psychosocial adjustment at home and in other settings, such as with peers, when becoming preoccupied with but also feeling

responsible for the emotional well-being of others may impair the child's own emotional well-being and capacities to function in an emotionally autonomous manner.

**Domestic conflict**
Marital conflict also presents children with significant challenges to emotional regulation (Cummings, 1994; Cummings & Davies, 1994; Davies & Cummings, 1994; Grych & Fincham, 1990). Parents' angry arguments are distressing and anxiety provoking to children of all ages, especially when arguments are left unresolved, are intense and persistent, involve physical violence between the adults, and/or are centered on children (cf. Grych & Fincham, 1990). In all cases, however, marital conflict threatens children's sense of emotional security in the home because of its threats to their own care, the integrity of the family, and, in some cases, their physical well-being (Cummings & Davies, 1996). Marital conflict can be especially stressful to children because of its links to child maltreatment, and a child who has previously been the victim of physical abuse in the context of a domestic dispute may, on future occasions, experience considerable fear for physical well-being when parents argue (Gelles, 1987). Regardless of whether it is tied to physical child abuse, however, children exhibit heightened anger, fear, and anxiety in the presence of arguing parents (Emery, 1989). Parents whose marriages are conflictual are also more authoritarian and inconsistent disciplinarians, adding further to the emotional demands on offspring. Repeated exposure to interparental arguing does not reduce children's stress over time but, instead, heightens their sensitivity and their negative reactions to it. It is therefore unsurprising that domestic conflict has also been associated with a variety of externalizing and internalizing disorders in both boys and girls (e.g., Jouriles, Barling, & O'Leary, 1987; Holden & Ritchie, 1991; see Cummings & Davies, 1994, for a review).

Regulating emotion in the context of marital conflict presents children with multiple, sometimes inconsistent, goals for their management of arousal. Children may seek to preserve their own emotional well-being even in the midst of family conflict. Alternatively, they may strive to prevent or stop parents from arguing, or provide comfort or defense to a parent who is distressed in order to reduce their own anxiety and stress when witnessing marital conflict. As another alternative, however, children may have to be primarily concerned with protecting themselves from potential physical harm.

Not surprisingly, strategies for managing emotional arousal in these circumstances may advance one of these goals but not others, and children's efforts to cope with marital conflict may pose additional psych-social risks to them. Some children simply avoid being present when parents argue, such as when younger children flee to another room (or cover their eyes and ears) or older children leave home. This regulatory approach may preserve a sense of personal well-being (especially if children can find social support outside the family) and prevent the children's becoming involved in parental disputes, but it does little to reduce future conflict in the home or its impact on children. Some children intervene directly into their parents' disputes or seek to distract parents by their own actions, often by misbehaving. These strategies may succeed in temporarily ending parental conflict, but at the risk of offspring becoming the focus of further disputes. Younger children may also seek to end parental conflict by acting helpfully, cooperatively, and prosocially, especially if they believe that marital disputes center on their behavior. In these cases, children risk assuming undue responsibility for marital harmony and experiencing inappropriate guilt when their efforts fail.

In the context of conflicting goals and problematic strategies for managing stress arising from marital conflict, there is evidence that children become hypersensitive to anticipatory cues of parental arguments. Katz and Gottman (1991) have argued that when parental conflict is recurrent, children become alert to cues of impending arguments at home such as critical comments, antagonistic facial expressions, awkward silences, and the like. Their hypervigilance has, in turn, several implications for emotional regulation. First, because anticipatory cues of conflict probably become easily conditioned to the child's own internal cues of arousal once parents begin arguing, it may take relatively little actual disturbance in the family to provoke heightened stress in offspring. As a consequence, children may become more easily distressed and disorganized by the arousal they experience when parental arguments finally erupt. Katz and Gottman (1991) point out that this process is similar to the concept of emotional "flooding" proposed by Ekman (1984) to explain how individuals with certain affective disorders can experience intense and persistent negative emotions that are difficult to regulate in response to circumstances that would not normally elicit such strong reactions in most people. In a sense, their hypervigilance to discern cues that anticipate negative arousal contributes to an over-reaction once the expectation of distress is confirmed.

Second, hypervigilance may also undermine other, more constructive, approaches to regulating the emotion evoked by parental arguments by focusing the child's ongoing attention on conflict and its precursors. Children may have more difficulty using distraction, physically avoiding being present during marital disagreements or reflecting thoughtfully on the causes and preven-tion of parental arguments when they have become hypersensitive and overreactive to the cues anticipating these disagreements. These effects of hypervigilance on emotional regulation may help to explain why many children become directly involved in their parents' disputes (Cummings, 1994; Cummings & Davies, 1994). In a sense, their acute anticipation of such conflict may make it difficult not to become directly involved once parents begin arguing, de-spite the fact that becoming involved in parental disputes poses risks to children's emotional (and possibly physical) wellbeing.

Finally, hypervigilance may have other long-term consequences for children's capacities to manage emotion and for their socioemotional well-being. Having become conditioned to respond affectively to cues signaling impending conflict in others, children may become acutely sensitive not only to the precursors of domestic conflict but also to more benign assertive or antagonistic encounters between people in other settings. As a consequence, they may overreact because of their construal of greater hostile intent than is evident when peers, or other adults, become argumentative. Furthermore, if their emotional responses to these cues of conflict tend to undermine more constructive forms of emotional management, these children may have difficulty responding adaptively not only at home, but elsewhere. Instead of learning how to avoid becoming involved in others' disputes, tactfully suggesting compromises, or devising other strategies of conflict resolution to disputes they witness outside of home, children may instead become emotionally enmeshed or overwrought.

When children are faced with persistent and intense marital conflict, therefore, they encounter circumstances requiring the management of their emotional arousal, but also encounter conditions that make effective emotional regulation difficult to achieve. Moreover, children's

strategies for regulating arousal — such as attending closely to cues that anticipate marital conflict or intervening into parents' disputes to relieve their own distress — may not only prove ineffective but may also enhance rather than reduce children's negative arousal. This behavior may make the net benefits of such strategies more uncertain and could threaten to further involve children in parental conflicts over which they have little control.

The problematic dynamic between the protection and risks associated with strategies of emotional regulation are even more clearly apparent when children are themselves the focus of domestic violence. When children are victimized by physical abuse, they experience conflicting feelings and impulses arising from being physically harmed by an adult who is also, in most cases, an attachment figure. It is not surprising that these children exhibit, as a consequence, a range of problems in emotional regulation that are sometimes manifested in angry or impulsive outbursts toward peers or teachers and are sometimes reflected in with drawn behavior (see Aber & Cicchetti, 1984; Cicchetti, 1990; Cicchetti et al., 1991; Erickson, Egeland, & Pianta, 1989; Shields, Cicchetti, & Ryan, 1994). Maltreated children also experience problems in relating to other people, such as peers, that reflect their difficulties in managing emotional arousal as well as enlisting positive social skills. Their hypersensitivity to conflict is also revealed in their intense emotional reactions when they are merely in the presence of adults who are arguing (Cummings, Hennessy, Rabideau, & Cicchetti, 1994; Hennessy, Rabideau, Cicchetti, & Cummings, 1994).

In many cases, the emotional regulatory problems of maltreated children arise from the inconsistent emotional demands imposed by their conditions of care. The same emotional signals from the child that often elicit nurturance from nonabusive parents may result, instead, in hostile or angry reactions from an abusive parent. Consequently, strategies of emotional regulation may arise that accommodate these conditions, but that create other vulnerabilities for children. Gaensbauer's (e.g., Gaensbauer & Sands, 1979) studies of maltreated infants and toddlers suggests that, in a manner paralleling studies with older children, young children may exhibit a shutting down or withdrawal of emotional responsiveness or may display inconsistent, unpredictable, or shallow affect signals as a consequence of their abuse. In a caregiving climate in which the child's emotional signals fail to elicit a predictably helpful response or, even more importantly, an aversive reaction from the parent, a child's muted or subdued emotionality may reflect the management of emotion in a manner intended to avert further harm. These signals, however, are difficult for most adults to read or interpret, and their obscurity may further undermine the quality of care that the child receives. In older children who experience maltreatment, managing the intense emotions arising from physical abuse may also include cognitive strategies that enable children to maintain a sense of control over their circumstances (but leave them vulnerable to assuming undue responsibility for their abuse) or to identify with the abuser (but create other problems in emotional self-control, especially with respect to anger and aggression) (Herzberger & Tennen, 1986).

Taken together, domestic conflict—whether it is manifested in marital conflict or in child abuse—presents extraordinary emotional demands on children for which their emerging capacities for emotional self-regulation may be inadequate. But more importantly, the conditions of the troubled family may render any approach to managing emotion problematic because of the vulnerabilities management strategies create, or enhance, in the child. Thus, although children

may try hard to cope constructively with the emotional demands of domestic conflict, there are likely to be no optimal approaches to emotional regulation available to them.

**Temperament vulnerability**
Although conditions of risk for the development of psychopathology often result from oppressive or threatening environmental demands, risk can also arise from the child's constitutional vulnerability and/or the interaction of intrinsic vulnerability with environmental stressors. As earlier noted, children with Down syndrome, autistic disorders, or attention-deficit or conduct disorders are each faced with compelling challenges in managing emotional arousal arising from a combination of their intrinsic vulnerabilities and the demands of their environments. In these circumstances, it is also important to evaluate how particular emotional regulatory strategies arise, and the ways they can simultaneously foster both resiliency and vulnerability in the developing person.

In the case of temperament, particular strategies for managing emotion can have important, but mixed, implications for psychosocial adjustment. A number of recent studies suggest that there are links between early infant temperamental predispositions and the development of behavior problems in early childhood (Bates & Bayles, 1988; Bates, Bayles, Bennett, Ridge, & Brown, 1991; Bates, Maslin, & Frankel, 1985; Gra ham, Rutter, & George, 1973; Thomas, Chess, & Birch, 1968). One important focus of this research concerns the developmental pathways and behavioral outcomes that are associated with temperamental inhibition. Temperamentally or behaviorally inhibited children typically display fear, negative affect, and withdrawal when confronted with novelty and challenge (Garcia-Coll, Kagan, & Reznick, 1984). For example, these children show elevated heart rates and behavioral indications of wariness or distress when encountering challenges ranging from initial encounters with unfamiliar adults or peers to the presentation of novel and incongruous auditory stimuli (cf. Kagan, Reznick, & Snidman, 1987).

One of us has been engaged in a collaborative research effort to elucidate the behavioral and physiological bases of behavioral inhibition and the role it plays in subsequent social behavior (Calkins, 1994; Calkins & Fox, 1992; Calkins, Fox, & Marshall, in press; Calkins, Fox, Rubin, & Coplan, 1995; Fox et al., in press). There are several findings emerging from this work that suggest that inhibited behavior arises from an effort to cope with high levels of physiological arousal associated with novelty, stress, and challenge, with long-term implications for emotional regulation.

First, across two separate longitudinal studies, we have observed a pattern of physiological reactivity reflected in brain electroencephalogram (EEG) asymmetry that distinguishes behavioral inhibition as a biologically based predisposition. Children selected for their extreme negative emotionality in early infancy showed a pattern of right frontal EEG asymmetry (Calkins et al., in press), and children who showed this same pattern across the first 2 years of life were likely to be fearful as toddlers (Fox, Calkins, & Bell, 1994). Furthermore, preschoolers who displayed reticent and wary behavior showed the same right frontal bias (Fox et al., in press). Fox and his colleagues have interpreted these early behavior-physiology links to reflect fundamental individual differences in approach-withdrawal tendencies, with a right frontal EEG bias reflecting greater withdrawal in novel or challenging situations (Fox, 1994). (This view is supported by recent work by Dawson and her colleagues, showing frontal asymmetries in the

offspring of depressed compared to nondepressed mothers; see Dawson, Groefer Klinger, Panagiotides, Hill, & Spieker, 1992; Dawson, Grofer Klinger, Panagiotides, Spieker, & Frey, 1992; see Dawson, 1994, for a review of this work).

Second, inhibited behavior in toddler-hood is strongly related to the tendency to be irritable and active during early infancy. Among a group of infants who were easily distressed and very active as infants, a large proportion were inhibited at 24 months of age (Calkins & Fox, 1992). In another sample of infants who were selected at four months for their heightened distress and motor activity, a significant proportion displayed fear and withdrawal in the laboratory when confronted by novelty 10 months later (Calkins et al., in press). Similar findings have been reported by other researchers (e.g., Kagan & Snidman, 1991), suggesting that displays of fear and withdrawal during toddlerhood are a function of an early tendency to be easily distressed by stimulation.

Third, the tendency to be inhibited remains fairly consistent through the preschool years. Inhibited toddlers were, in one study, found to be reticent, wary, and anxious preschoolers when observed with their peers at age 4 years (Calkins et al., 1995). This cross-age association was strongest for children who were most extreme in their early behavioral inhibition, suggesting that for some children this tendency is somewhat resistant to change. To be sure, this tendency is not immutable; Kagan (1994a, 1994b) has noted that the responses of caregivers—including daycare workers as well as parents — are significant influences in whether a behaviorally inhibited young child maintains this disposition over time or instead develops a style that is somewhat more outgoing. However, children who are more extreme in their early behavioral inhibition are likely to foster more accommodating responses from caregivers than are children who are less extreme in their inhibi tory tendencies, and this interaction is likely to result in a more entrenched temperamental quality.

Together, these findings suggest that infants who are easily aroused by external stimulation (which Kagan believes derives from a low threshold for arousal in the limbic system; see Kagan & Snidman, 1991) show heightened negative emotion and motor activity, and this behavioral response often develops into a tendency in toddler-hood to try actively to escape, avoid, or alleviate the stress associated with novel and arousing stimuli. In a sense, the rather global reaction patterns of infancy evolve into the more sophisticated behavioral repertoire of the preschooler that fosters not just reactance to external stimulation, but also efforts to control exposure to arousing stimuli and to emotionally manage their impact. In this respect, behavioral inhibition can be viewed as a constellation of emotional regulatory strategies that are intended to cope with a young child's biologically based, temperamental vulnerability to becoming easily aroused by novelty and challenge. By contrast with the preceding examples of environmental vulnerability, in this case the emotional demands with which a child must cope arise intrinsically, from a temperamental vulnerability to negative arousal in uncertain and unfamiliar circumstances. Social influences also assume a role in the quality and maintenance of this style, as earlier noted, and both intrinsic and extrinsic strategies of emotional management may help to perpetuate behavioral inhibition by the ways in which inhibitory tendencies are accommodated, but not challenged or changed.

Viewed in this light, therefore, it is important to appreciate the costs and benefits of such an inhibitory strategy enlisted in situations entailing unfamiliarity, uncertainty, and challenge. In such situations —such as when encountering an unfamiliar person during a visit with the parent to a neighbor—most children are confronted with competing goals: to interact with a friendly adult, to explore a novel environment, to learn from people and situations that provoke interest (and experience the benefits of self-esteem that arise from surmounting this challenge), and to avoid harm that might potentially also result from an unfamiliar person. In young children, these alternative goals occur in a multivalent emotional context: children experience competing feelings of interest and wariness, and of excitement and fear, that novelty commonly inspires. As a consequence, developmental researchers have noted the dynamic interplay between these competing emotions and goals. Many young children, for example, will greet a stranger with a "coy" combination of a shy smile and averted gaze, or will explore the novel surroundings only as far as possible while remaining within mother's gaze, or will regularly reestablish visual or physical contact with the caregiver during exploratory forays (cf. Thompson & Limber, 1991). In each case, however, these behavioral strategies reflect the interaction of competing emotional reactions and of competing goals for the situation.

The same circumstances are likely to evoke a high level of negative arousal for a behaviorally inhibited child, however, and thus a different set of behavioral strategies appear. The social initiations of an unfamiliar adult, for example, are often met with fretting and crying, turning away or withdrawal, or efforts to climb into the arms or lap of the parent. As strategies for regulating heightened emotion, these behaviors have several advantages. Emotional expressions like fretting alert the caregiver that the child is distressed. Withdrawal helps to remove the child from the source of aversive stimulation, and climbing into the parent's lap provides comfort to alleviate the anxiety associated with the situation. In a sense, therefore, the inhibited child's behavioral response effectively fosters the management of heightened emotion in a novel, challenging situation, but at a cost. The inhibited child has fewer opportunities to learn about new people or environments. There are similarly reduced chances for the child to develop self-confidence by successfully coping with the challenges of mastering a novel environment. Perhaps most importantly, the child will learn little about this novel person or environment to foster confidence or reassurance in future situations; that is, the inhibited behavioral style is unchallenged. For example, the child is less likely to observe that there are similarities between the neighbor's house and his or her own that might reduce the anxiety associated with being in a novel environment. The child is unlikely to explore the house to discover that there are toys and books that might provide some distraction from the anxiety of being in an uncertain situation— and which offer new, more constructive, means of coping with heightened arousal. The child is also unlikely to have a sufficiently positive encounter with the stranger to learn that unfamiliar people usually pose no significant threats, and sometimes offer meaningful rewards. The constellation of withdrawal and inhibition effectively manages emotional arousal, in other words, but provides the child with a very limited view of the environment that is the source of anxiety and arousal and few of the benefits that an encounter with novel settings and persons can offer.

Moreover, there are potential longer term consequences of behavioral inhibition as an emotional regulatory style. As parents respond to their offspring's inhibitory behavior, their efforts to manage the child's emotions and actions may create further difficulties (Calkins, 1994; Fox & Calkins, 1993). Some parents may not provide adequate support for the child, for example,

believing instead that the child needs to "get used to" situations that cause distress. In these instances, however, children may become even more inhibited as a result of lacking the emotional support for which they rely on their caregivers. For some children, on the other hand, the consequences of retreat and withdrawal are reinforcing: parents may take on the burden of relieving the child's anxiety, but with the result that the child becomes more dependent on the parent in novel and challenging situations (cf. Kagan, 1994a). Furthermore, the child's capacities to cope with novel challenges in circumstances when the parent is not present may become more limited as these challenges become a more normative life experience at older ages (e.g., when the child must meet new peers or adults at day care or school). In each case, the convergence or dissonance between the parent's extrinsic strategies of emotional regulation and the child's behavioral strategies for the intrinsic regulation of emotion are important predictors of the long-term consequences of an early-emerging inhibitory style and whether, in fact, it is maintained over time.

Findings from a recent longitudinal study confirm the potential consequences of early-emerging behavioral inhibition for later social development. Children who had been identified as inhibited or uninhibited as toddlers were subsequently observed at age 4 years in episodes of peer play and task-related behaviors. Peer encounters present preschoolers with unique social and emotional challenges. They must learn how to initiate interaction with other children without being ignored or rejected, and sometimes this means coping with the fear or shyness (as well as the excitement) that the presence of others may evoke. In this follow-up study, however, children who at age 2 years had been classified as extremely inhibited later, at age 4 years, engaged in long periods of onlooking and unoccupied behavior, made few attempts at conversation, social initiations, or group play, and failed to become involved in group tasks with their peers (Calkins et al., 1995). In a sense, the same behavioral strategy that the toddler had used to regulate the heightened emotion engendered by novel challenges —that is, by withdrawing and fretting rather than exploring — was seen later in the preschool years in children's passive, onlooker behavior.

As a consequence, behaviorally inhibited children tend to exist at the periphery of social activity and risk eventually being shunned by their peers if this style persists in later years. Indeed, over time these children may continue to remove themselves from further opportunities for social interaction and may risk becoming socially withdrawn, depressed, and lonely (Rubin, Stewart, & Coplan, 1995). Inhibited children who eventually become socially withdrawn risk facing a variety of additional difficulties, including peer rejection, lack of friendships, and poor social skills. As they grow older, they are more likely to display signs of depression and anxiety (Rubin, Hymel, Mills, & Rose-Krasnor, 1991; Rubin, Lem-are, & Lollis, 1988; Rubin et al., 1995).

Although behavioral inhibition is one of the best researched manifestations of temperamental vulnerability to problems in emotional regulation, it is not the only one. It now appears possible that some children, by virtue of being prone to intense anger displays (Bates et al., 1991; Bates & Bayles, 1988) or a high level of activity (Campbell, 1991), are more likely to develop strategies of emotional management in efforts to seek an optimal level of arousal. However, such strategies may bring with them the cost of being unable to control impulsivity and approach-oriented behaviors (Fox & Calkins, 1993). In the case of temperamental inhibition, then, the problem is not necessarily that these children are choosing inappropriate or ineffective strategies of

regulating their emotional arousal. Rather, given the multiple goals and needs of these children, almost any strategy for managing arousal is likely to entail costs as well as benefits.

## *Understanding the Dynamics of Emotional Regulation*

If it is true that children who are at risk for developmental disorders are confronted by emotional demands (arising from environmental stress, intrinsic vulnerability, or both) in which their efforts to regulate emotion provide them with some resiliency, but also create or enhance other vulnerabilities, several implications follow for research on emotional regulation in the context of developmental psychopathology.

First, in many circumstances there may be no "optimal" means of regulating emotion. This is especially likely to be true when children are in circumstances that impose strong and inconsistent demands for emotional self-control, such as those reviewed above. That is, each strategy that a child might enlist to cope with a depressed parent, or marital conflict, or their own proneness for heightened arousal, or many other conditions of risk entails a combination of protection and vulnerability that exists in dynamic tension. Selecting a means of managing emotional arousal in such a context depends on the child's capabilities, his or her purposes for emotional self-control, situational incentives (such as the behavior and support of caregivers), and other factors. But in many circumstances, the individual's efforts are likely to yield a problematic mix of satisfying and unsatisfying outcomes, often because of the trade-offs that are entailed in managing one's own emotional arousal and accomplishing other goals pertinent to the situation.

This idea has important implications for conceptualizations of "emotional dysregulation" that often appear in the literature in developmental psychopathology. It suggests that problems in regulating emotion arise not because children are using inappropriate or deficient strategies, but rather that almost any approach that might be used to manage emotion has disadvantages as well as advantages for psychosocial wellbeing. In a sense, many children living with a depressed parent may be coping as well as possible under such circumstances, and children who are temperamentally vulnerable to heightened arousal in novel situations may be coping as successfully— given their needs, the support of their caregivers, and the other circumstances in which they live—as possible. Conceptualizing their difficulties, not as deficient strategies of emotional regulation but rather as compromises between extraordinarily difficult emotional demands and inconsistent emotional goals, may contribute to greater insight concerning the adaptations these children are making to the intrinsic and extrinsic stresses they experience.

Second, it is unwise to necessarily look for indicators of optimal emotional regulation in positive psychosocial functioning. Although in many cases, effective emotional regulation is manifested in emotional expressions of moderate intensity, agreeableness, sympathetic responsiveness, and other signs of positive socioemotional functioning, these outcomes are multiply determined and may not always derive from efforts at emotional management. More important, in conditions of risk, the same outcomes may derive instead from problems in emotional regulation, such as when the child of a depressed mother responds with sympathetic care to her distress (reflecting the child's emotional investment in the mother's ongoing affective condition), or children seek prosocially to assist in solving their parents' marital problems (risking their further involvement in domestic conflict). In such circumstances, it is potentially unwise to assume that these positive

psycho-social behaviors necessarily reflect effective emotional regulation. Furthermore, in conditions of risk, behaviors that superficially appear to reflect emotional dysregulation — such as the emotional shallowness of maltreated infants and toddlers, or the withdrawal of inhibited young children—may be, in their circumstances, the most effective means of emotional regulation possible. In the end, therefore, alternative criteria for evaluating the nature and quality of emotional regulation in children who are at risk for psychopathology are necessary to ensure that researchers are indeed studying strategies of emotional management, rather than generally healthy psychosocial functioning.

This leads to a third implication of this analysis, which is that emotional regulation must be studied in the context of the emotional goals of the individual and the circumstances in which those goals are to be achieved. Both goals and situational demands can vary considerably in the circumstances in which emotional regulation is employed. As the research reviewed above indicates, however, they may be among the most important determinants of how children at risk strive to cope with the emotional demands of the circumstances in which they live, and the behavioral outcomes of their self-regulatory efforts.

The importance of considering the goals of emotional regulatory efforts, the intrinsic and extrinsic demands that shape those goals, and the efficacy of alternative strategies for managing emotion, are apparent also for typically developing children. Consider, for example, a preschool child who is angry at a friend who has wronged her. Does the most effective strategy of emotional regulation in this situation involve crying loudly, retaliating, avoiding the perpetrator, or seeking an adult's assistance? The answer to this question probably depends less on the child's developmental capabilities or idiosyncratic characteristics and more on the specific circumstances, such as the child's power relative to that of the wrongdoer, the values of the adults to whom the child might turn, and the behavior of other children in the setting. In addition, the child's response is also likely to hinge on his or her goals for managing emotion in a particular manner, whether to reestablish a feeling of personal well-being, restore good relations with the perpetrator, ensure that the wrongdoing does not recur, or restore esteem within the peer group. The child's temperamental profile may significantly influence the child's preferences among these alternative goals and the strategies chosen to accomplish them. Beyond these proximate considerations, it is important also not to neglect the importance of the sociocultural context in which these actions occur. It probably makes a difference whether the child is from a middle- or low-income family, is Latino (or Latina) or Anglo, or lives in Japan or the United States, because of variations in the "emotional culture" associated with these differences (cf., Gordon, 1989). Variations in the local emotional culture not only affect the emotional goals of the child as they are internalized through socialization processes (e.g., in what contexts to outwardly express emotion and to whom), but also the values of socialization agents that shape the efficacy of alternative emotional regulatory strategies.

As earlier noted, a child may also have long-term as well as short-term goals associated with the regulation of emotion, and these goals may conflict. Withdrawing from a feared bully may produce some immediate relief for a preschool child who has been wronged, but it may also heighten the longterm risk of future teasing or bullying and the emotional demands that this will entail. Thus beyond the possibility of conflict between immediate goals for managing emotions, there is also the likelihood that immediate goals may conflict with longer term goals and the

emotional strategies indicated by each. Their relative weighting is a complex calculus, affected by the child's capacities to conceive and balance them as well as their salience in the immediate situation. And as noted above, these considerations are especially likely to be true for children who are in conditions of risk of psychopathology, partly because the strategies children enlist to obtain immediate relief from anxiety or fear may exacerbate their difficulties in the long run.

A fourth, and final, implication of the view that emotional regulation can simultaneously entail protection and vulnerability, especially in conditions of risk, is that because emotions are regulated both internally and by others (especially by partners in close relationships), emotions can be affected in both intentional and unintentional ways by other people. As earlier noted, potential conflict between intrinsic and extrinsic modes of emotional regulation can derive from the deliberate efforts of caregivers to manage a child's emotions in ways that are incongruent with the child's self-perceived goals or needs, such as when the parents of a temperamentally inhibited child seek to encourage more friendly, outgoing sociability than the child feels comfortable with. Conflict may also result, however, from the unintended emotional demands of caregivers that conflict with the child's efforts to manage emotion, such as when parental arguments or an adult's emotional pathology influence children's emotional behavior in ways that are dissonant with the requirements for emotional regulation that arise from the emotional climate of the home. In a family rent by domestic conflict, for example, children may be simultaneously required to be emotionally subdued and self-controlled (to avoid an encounter with an angry and potentially maltreating parent) while also remaining hypervigilant — and potentially emotionally hyperreactive — to any signs of conflict they can detect at home. In both atypical and typically developing populations of infants and children, it is through both deliberate and unintended emotional demands that the emotional life of offspring, and their strategies of emotional regulation, take shape.

*Conclusion*
In a culture like ours where emotions reveal both the peaks and valleys of human experience, it is easy to assume that processes of emotional regulation help to elevate the valleys—and refine the peaks—to optimize emotional experience. For many developing persons, especially those in supportive social environments, this is probably true most of the time. Emotion and its regulation, however, often entail trade-offs between alternative goals, and sometimes those goals are in conflict. Whether during disagreements with workplace associates, negotiations with family members, or intimate exchanges with a close partner, social interactions often entail alternative goals that are sometimes mutually incompatible. This incompatibility is especially likely to occur in conditions in which children are at risk for the development of psychopathology because of the special emotional demands imposed by difficult caregiving circumstances or by intrinsic vulnerability, combined with a young child's emergent but limited repertoire of emotional regulatory strategies. In these circumstances, the possibility of nonoptimal emotional regulatory strategies is high.

To provide the most helpful supportive or therapeutic assistance to such children, developmental scholars and clinicians must have a thoughtful appreciation of how strategies of emotional regulation are forged in circumstances of risk. By appreciating the associations between emotion and goals and the diverse influences on the development of individual differences in emotional regulatory strategies, a more sensitive and multifaceted view of emotional regulation is likely to

be achieved. By understanding further that nonoptimal strategies of emotional regulation may be almost inevitable in some of the circumstances of risk that children too commonly experience, clinicians can begin to appreciate why these strategies arise, and how such children can be assisted. Finally, by appreciating that even the best efforts of emotional regulation provide some protection, but also inherent and perhaps inevitable risks to the child, a sympathetic understanding of the life experience of these children is enhanced.

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