Treatments for Anger Regulation and Reactive Aggression in Young Children

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CASE VIGNETTE

Bobby is a 10-year-old boy in the fourth grade at his local elementary school, and he and his classmates are playing basketball on the playground. The other boys do not usually let Bobby play with them, but they are short of a player and have allowed him to join. At first, Bobby is excited to be included, but his excitement quickly turns to frustration when he realizes that the other boys are not passing him the ball. When he is open for a shot, no one seems to notice, even when he yells the other boys’ names. Red-faced and scowling, Bobby steals the ball from his own teammate, throws it across the playground, and runs away. He completely forgets about his open shot or his team’s chances of winning the game.

Unfortunately, incidents such as this one happen to Bobby often. He is frequently the target of jokes, and he is rarely included in the games and activities of the other children unless a teacher steps in to help. Even then, after a few minutes, Bobby often gets angry and explodes by tossing board games, ripping notebooks, or throwing a tantrum. After these episodes, Bobby’s peers are even less inclined to include him in their play. As Bobby grows more aware of his exclusion, he begins to avoid school, complain to the school nurse that he doesn’t feel well, or cry until his parents allow him to stay home. As Bobby’s grades start to slip, he begins feeling irritable and sad about himself and the future.

Fortunately, Bobby’s teacher recognizes his distress and refers him to a school-based program designed to teach social skills, problem solving with peers, emotion identification and understanding, and emotion regulation. Over time, Bobby’s ability to manage his angry feelings slowly improves, his aggressive behaviors slowly diminish, and his peers begin to include him in their play with greater enthusiasm.
This chapter concerns our theoretical understanding of anger in young children, as well as intervention approaches for young children's anger, with a particular focus on the peer context. All young children get angry and frustrated when things do not go their way (Fabes & Eisenberg, 1992). These feelings are developmentally normative and appropriate and do not require intervention. In fact, interventions for young children's anger often emphasize the mantra that "angry feelings are okay." However, young children's anger becomes more concerning when it frequently results in aggressive behaviors. A second adage common to intervention programs for young children is "but aggressive behaviors are not okay." Concern about aggressive behaviors toward peers increases when these behaviors do not decline as children progress from preschool age into middle childhood (NICHD Early Child Care Research Network, 2004).

Moreover, frequent reactive aggression may set a child on a pathway toward peer rejection, school avoidance, academic difficulties, and depression (see, for review, Hubbard, McAuliffe, Morrow, & Romano, 2010). As described in the case vignette, Bobby's pattern of reactive aggression cost him his friends, his interest in school, and his self-esteem. This chapter will describe what we understand about young children's anger from a theoretical perspective and what we know about evidence-based treatment options for these children. The first section of the chapter will focus on the theory underlying anger and aggression in young children, and the second section will examine current intervention approaches and their outcomes. Finally, the third section will include recommendations for future directions in intervention development, implementation, and evaluation.

THEORETICAL PERSPECTIVES ON ANGER AND AGGRESSION IN CHILDREN

Social Information—Processing Model

The social information—processing (SIP) model is the best known theoretical approach to understanding young children's aggression. Interestingly, in the original version of this model, no mention was made of the construct of anger. Rather, Dodge, Pettit, McElrasky, and Brown (1986) proposed that children progress through five steps as they take in information about a social situation and formulate a behavioral response. These steps include (a) encoding social cues, (b) interpreting these cues, (c) generating potential responses to the situation, (d) evaluating the possible consequences of these responses, and (e) selecting a response to enact.

In their reformulation of the SIP model, Crick and Dodge (1994) described briefly how emotion may interact with or influence the SIP steps. Subsequently, Lemerie and Arsenio (2000) developed a more thorough theory of the interplay of emotion and cognition in children's SIP. Both of these perspectives suggest that children progress through the five SIP steps differently, and perhaps less adaptively, at times when they are emotionally aroused, perhaps because emotion tends to compromise judgment.

However, neither Crick and Dodge (1994) nor Lemerie and Arsenio (2000) considered the role of the particular emotion of anger in the SIP steps. Experiencing anger likely affects children's SIP in specific ways (Bierman, 2007; Snyder, Schrepferman, Brooker, & Stoolmiller, 2007). For example, in the encoding step, children may notice
fewer social cues if they are angry, or they may disproportionately perceive negative social cues. In the interpretation step, when children are angry, they may more easily attribute negative intentions or hostility to their peers’ behavior than they would otherwise. In the generation and evaluation steps, when children are angry, they may consider more aggressive solutions to problems with peers, and they may be less concerned with the negative social consequences of these solutions (e.g., “It doesn’t matter if he doesn’t like me, because I don’t like him either!”). In combination, these examples suggest some reasons that children may be more likely to behave aggressively when they are angered, within the context of an SIP model.

In a previous chapter (Hubbard & Dearing, 2004), we reviewed literature suggesting that aggressive children are more likely than their peers to struggle with emotion regulation, and perhaps anger regulation especially. In brief, we found strong empirical support for the hypothesis that aggressive children have difficulties with emotion regulation, in that they are more likely than their peers to be physiologically reactive to emotion-evoking social situations, to express negative emotions, and to display high levels of negative emotionality. These findings suggest that one possible reason aggressive children may often struggle to progress through the SIP steps adaptively is that they become angered more easily than their peers, and this anger negatively impacts upon their SIP processing.

Integration of anger into the SIP model is clearly an important goal for our field. Such an integrated model may more adequately describe the multiple mechanisms driving children’s aggression. However, this approach implies that anger is only important in understanding children’s aggression to the extent that it interacts with cognitive mechanisms. In contrast, it is our belief that we also need to “think outside the SIP box” in considering how anger and aggression may relate. Anger may influence children’s aggression in ways that are unrelated to SIP. Consideration of the relation between anger and aggression, independent of SIP, has been called for by several researchers and interventionists (e.g., Denham & Burton, 2004; Greenberg, Kusche, & Speltz, 1991). Additionally, the work of prominent emotions theorists supports the idea that emotion is not inherently intertwined with cognition. For example, in a highly influential paper, Izard (1993) posited that emotion is not always activated by cognition, and he specified three systems (neural, sensorimotor, and motivational) he believes activate emotion independent of cognition.

For example, children who anger more easily are likely to experience physiological overarousal more quickly than other children when provoked by peers. High levels of physiological arousal may increase the challenge that these children face when trying to regulate angry feelings and curb aggressive behaviors (Scarpa & Raine, 1997). In addition, children who anger easily may find themselves in more negative interactions with their peers (Hubbard, 2001), and these interactions may provide increased opportunities to engage in aggressive behavior. These are just a few examples of ways in which the tendency to anger easily may negatively influence children’s aggressive behavior, beyond its negative impact on children’s SIP.

Reactive and Proactive Aggression

Many years ago, Averill (1982) succinctly described the complex relationship between anger and aggression when he stated that all anger does not lead to
aggression, and all aggression is not the result of anger. This thinking has led to the theory that aggression may be driven by two different functions, one reactive and the other proactive (Dodge, 1991; Vitaro & Brendgen, 2005). Reactive aggression is anger driven, defensive, retaliatory, and in response to real or perceived provocation. Conversely, proactive aggression is displayed to reach a goal, whether the goal involves material or territorial gain (proactive instrumental aggression) or social dominance (proactive bullying aggression). Thus, reactive aggression is closely theoretically tied to anger, whereas proactive aggression is not.

A growing empirical literature suggests that reactive aggression is propelled by different social-cognitive and emotional processes than proactive aggression. In the following paragraphs, we will review this literature briefly (see Table 11.1 for a summary of the differences between reactive and proactive aggression).

Social cognition. Convergent research across diverse samples (e.g., elementary, middle, and high school children and adolescents in several countries; low-socioeconomic-status [SES] African American boys; behavior-disordered Dutch boys; incarcerated adolescents) demonstrates that different SIP steps predict children’s tendency to engage in reactive versus proactive aggression. More specifically, reactive aggression, but not proactive aggression, is positively related to difficulty encoding social cues (Dodge et al., 1997), the tendency to attribute hostile intent to peers in ambiguously provocative situations (Crick & Dodge, 1996; De Castro, Merk, Koops, Verrman, & Bosch, 2005; Dodge & Coie, 1987; Kempes, Matthys, Maassen, van Goozen, & van Engeland, 2006; Nas, Orobio de Castro, & Koops, 2005; Schippell, Vasey, Cravens-Brown, & Bretveld, 2003; Schwartz et al., 1998), and the generation of aggressive responses to social conflicts (De Castro et al., 2005; Dodge & Coie, 1987; Dodge, Lochman, Harnish, Bates, & Pettit, 1997). These findings suggest that the SIP steps of encoding social cues, interpreting social cues, and generating potential responses to social situations may be particularly influenced by children’s anger.

Three other social-cognitive processes appear more closely linked to proactive aggression. Particularly, proactive aggression, but not reactive aggression, is positively related to self-efficacy in enacting aggressive behaviors (Crick & Dodge, 1996; Dodge et al., 1997), prioritizing instrumental goals over social

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goals in peer interaction (Crick & Dodge, 1996), and expecting that aggressive behavior will result in positive outcomes and not in negative outcomes (Arsenio, Gold, & Adams, 2004; Crick & Dodge, 1996, Dodge et al., 1997; Hubbard, Dodge, Cillessen, Coie, & Schwartz, 2001; Schwartz et al., 1998; Smithmyer, Hubbard, & Simons, 2000). Interestingly, this last body of research has shown links to a diverse range of expected positive outcomes, from the belief that aggression will result in material or territorial gain, to the belief that it will lead to respect and liking by others (Smithmyer et al., 2000), and even to the belief that it will make one feel happier (Arsenio et al., 2004). Thus, whereas reactive aggression seems more closely tied to the first three SIP steps, proactive aggression seems more related to the last two SIP steps.

**Emotional and physiological processes.** As described earlier, theorists conceptualize reactive aggression as emotionally driven, whereas they view proactive aggression as quite unemotional. Furthermore, the emotion that is most often invoked when characterizing reactive aggression is anger. The hypothesis that reactive but not proactive aggression is related to difficulties with anger and its regulation has garnered support across a number of studies (De Castro et al., 2005; Dodge & Coie, 1987; Little, Brauner, Jones, Nock, & Hawley, 2003; Little, Jones, Henrich, & Hawley, 2003; McAuliffe, Hubbard, Rubin, Morrow, & Deering, 2007; Price & Dodge, 1989; Raine et al., 2006). The samples used in these studies were diverse and included elementary school children, low-SES African American boys, German adolescents, and antisocial adolescents.

However, in all of these studies, anger was assessed in a traitlike way through self-report, peer report, or hypothetical vignettes. None of the studies included laboratory-based observational measures of children's anger or measures of the physiological arousal that likely accompanies anger. This is particularly important because episodes of reactive aggression are thought to be characterized by high levels of physiological arousal, whereas episodes of proactive aggression are consistent with a profile of low physiological arousal (Dodge, 1991; Vitaro & Brendgen, 2005). Yet, we have precious little data along these lines.

In fact, only one study of the associations between the subtypes of aggression and physiological arousal has been published to date. In this large-scale study (Hubbard et al., 2002; Hubbard et al., 2004), teacher ratings of reactive and proactive aggression were gathered on 272 second-grade children. These children then participated in a laboratory procedure in which they lost a board game to a peer confederate who cheated. Physiological data on children's skin conductance reactivity (SCR) and observational data on children's anger expression were collected during each turn of the game. Findings revealed that reactive aggression, but not proactive aggression, was positively related to SCR and observed anger expression. Moreover, these relations held not only when SCR and anger expression were aggregated across the game but also in terms of rate of increase over the time span of the game. That is to say, children higher in teacher-rated reactive aggression had steeper increases in their SCR and anger expression over the course of the game, whereas these increases were not related to proactive aggression.

This project (Hubbard et al., 2002; Hubbard et al., 2004) was an important starting point in understanding the role of physiological factors in anger arousal and aggression likelihood. Still, more information is needed about whether children's physiological and emotional profiles differ in the moment when they are
engaging in episodes of reactive versus proactive aggression. To address this question, Hubbard and colleagues (2010) developed laboratory-based measures of reactive and proactive aggression involving the use of virtual peers. They assessed physiological arousal and anger expression simultaneously with measurements of the subtypes of aggression. Interestingly, observed anger expression correlated positively with children’s levels of reactive aggression during the laboratory tasks, but not their levels of proactive aggression. These findings provide further support for the idea that reactive aggression is driven by anger and initial evidence that proactive aggression is not. Furthermore, children’s physiological arousal was positively related to their levels of reactive aggression in the lab, but negatively related to their levels of proactive aggression. These data provide the first empirical support of theory suggesting that proactive aggression is literally “cold blooded,” in that it is displayed when children are particularly calm and unaroused.

Differential treatment approaches for reactive versus proactive aggression. The literature previously reviewed suggests that it may make sense to develop differential interventions for reactive aggression and proactive aggression in young children. Separate interventions for reactive and proactive aggression have been suggested by numerous researchers (e.g., Brown & Parsons, 1998; Crick & Dodge, 1996; Dodge, 1991; Dodge & Coie, 1987; Dodge & Schwartz, 1997; Larson, 1994; Little et al., 2003; McAdams, 2002; Phillips & Lochman, 2003; Poulin & Boivin, 1999; Salmivalli & Nieminen, 2002; Vitaro & Brendgen, 2005; Vitaro, Brendgen, & Tremblay, 2002; Waschbusch, Willoughby, & Pelham, 1998; Weinschenker & Siegel, 2002). These treatment packages could target the specific correlates of each subtype of aggression. For example, a reactive aggression intervention could emphasize anger regulation training, hostile attributional bias reduction, and social problem solving. In contrast, treatment for proactive aggression could stress the negative consequences of aggressive behavior, the importance of social goals, and the development of empathy for others. Aggressive behavior may be decreased more effectively if the specific behavioral, social, social-cognitive, emotional, and physiological underpinnings of each subtype of aggression are targeted separately.

Clearly, given the high correlation between the subtypes of aggression (Vitaro & Brendgen, 2005), many aggressive children would benefit from both treatment packages. However, a differentiated approach to the treatment of the subtypes of childhood aggression may make sense not only for those aggressive children who display primarily one subtype of aggressive behavior but also for those children who display both subtypes as well. The idea is that careful targeting of the mechanisms driving each subtype of aggression may enhance the efficacy of our intervention efforts with all aggressive children.

Currently, intervention programs for aggressive children have not progressed to the point of overtly distinguishing between reactive and proactive aggression and explicitly targeting one or the other subtype of aggression. However, over the past several decades, programs for aggressive children have increasingly focused on reducing children’s tendency to aggress when provoked, as well as the anger that drives this behavior. In the following section, we will first provide a framework for categorizing these intervention approaches and then review their history and development.
CURRENT INTERVENTION PROGRAMS FOR YOUNG CHILDREN'S ANGER

Sukhodolsky, Kassinove, and Gorman (2004) describe three approaches that interventionists take when working to reduce children’s levels of anger and aggression: skill development, problem solving, and affective education. Essentially, these three approaches map onto the targets of behavior, social cognition, and emotion in interventions for young children.

The skill development, or behavioral, approach uses modeling, coaching, and role-playing to teach children social skills and prosocial behaviors. The idea here is that children become angry and aggressive when they lack the skills to make friends and get along well with other children. It is believed that providing children with these skills will lead naturally to decreases in anger and aggressive behaviors. Many years ago, Ladd and Mize (1983) translated these principles into a model of social skills training with three basic objectives: improving skill understanding, promoting skill performance, and encouraging maintenance and generalization of skills. Early intervention programs for peer-rejected and aggressive children focused solely on the development of social skills and prosocial behavior as a means of curbing anger and aggression (e.g., Bierman, 1986; Bierman, Miller, & Stabb, 1987).

Although these efforts provided a promising first step, it soon became clear that children who experience serious problems with anger and aggression would benefit from a more comprehensive treatment approach (Bierman & Powers, 2009).

The next component to be included in programs targeting children’s anger and aggression was termed problem solving. This approach followed the SIP model, and programs addressed the cognitive biases and distortions that characterize peer-rejected and aggressive children (Crick & Dodge, 1994). Problem-solving interventions were often based on the work of Spivack and Shure (Shure, 1994; Spivak, Platt, & Shure, 1976) and emphasized step-by-step processing of social situations. Children were instructed to stop and consider all aspects of a problem before acting. They progressed through a series of questions, such as “What is the problem?” and “What would happen if I did that?” Instructors helped children to brainstorm solutions to problems and evaluate possible responses. Children finished by implementing an appropriate response and evaluating its effectiveness. These interventions emphasized breaking down automatic and instantaneous social-cognitive processes into gradual and deliberate steps. Children were directed through each step separately and systematically to master social cue perception and interpretation, generation of nonaggressive responses, and improved consequential thinking skills. By allowing children to practice SIP in this step-by-step manner, problem-solving interventions targeted cognitive deficits that result in anger and aggressive behavior. Importantly, these programs did not replace a focus on behaviors with a focus on social cognitions. Rather, they encompassed the teaching of behavioral skills within the broader SIP framework, as theorists began to understand the social-cognitive processes that precede and drive both aggressive and prosocial behaviors in young children.

Much more recently, intervention efforts for children’s anger and aggression have begun to include a focus on what Sukhodolsky, Kassinove, and Gorman (2004) refer to as affective education. This component includes the identification and understanding of emotions in the self and others, as well as skills related to the
effective regulation of emotion. Again, these more recent programs do not typically neglect the behavioral and social-cognitive skills that are essential to decreasing levels of aggression in young children. They do, however, include a focus on emotion knowledge and management as additional critical skills for young children struggling with aggressive behaviors.

Sukhodolsky and colleagues (2004) conducted a meta-analysis of intervention programs for anger in children and adolescents in which they evaluated findings from 40 empirical studies. Their results revealed an overall effect size of .67 across these studies. However, effect sizes varied somewhat across programs using only skill development (behavioral focus; Cohen’s $d = .79$), only problem solving (social-cognitive focus; Cohen’s $d = .67$), only affective education (emotion focus; Cohen’s $d = .36$), or a combination (Cohen’s $d = .74$). Interestingly, when findings were broken down by type of outcome measure (physical aggression, anger experience, self-control, problem solving, and social skills), results suggested that programs designed to target one domain often actually had a greater effect on another area of functioning. For example, programs targeting problem solving alone were shown to impact children’s experience of anger even more than their problem-solving abilities.

In the following sections, we will briefly describe three intervention programs for aggressive children that combine skill development, problem solving, and affective education, as well as the empirical support for each program. These descriptions will highlight the current state of the science in the development of intervention programs for anger and aggression in young children.

Second Step

The Second Step program (Grossman et al., 1997) includes an explicit focus on problem-solving techniques, in that it targets children’s ability to proceed through each SIP step adaptively. Much like the Spivack and Shure model, this intervention asks children to (a) identify the problem, (b) generate solutions, (c) evaluate their possible solutions, (d) select and enact a solution, and (e) evaluate the outcome of the interaction. Lessons provide opportunities for children to practice each SIP step.

In addition, Second Step incorporates affective education by teaching children to identify feelings in themselves and others, take the perspectives of others, and respond empathically to others’ emotion. The program focuses on emotion understanding and empathy by discussing verbal and visual cues that might suggest certain emotions and then uses stories, discussion, and role-play exercises to help children develop these skills.

Beyond emotion understanding, the Second Step program also includes an emphasis on emotion regulation that focuses on recognizing and reducing angry feelings. First, it teaches children strategies to recognize physiological changes in their bodies that are associated with angry arousal. Children also identify triggers, like teasing, that often make them angry. Then, children use positive self-talk and other stress reduction techniques to stay in control of their emotions. Discussion and rehearsal of these steps is thought to improve children’s ability to regulate emotions, thus reducing angry outbursts leading to reactive aggression.
Grossman et al. (1997) evaluated Second Step in an initial trial including 790 second- and third-grade students in 49 classrooms. Trained classroom teachers taught the Second Step curriculum twice per week for 4 to 5 months. Observed physical aggression decreased from pre- to postintervention for students participating in the program but not for their peers in the control condition. Later trials in the United States and in Norway also had positive results. In the United States, teacher reports suggested improved student behavior, improved social reasoning, and, for girls, better cooperation after participation in the intervention. Participants also showed significantly less aggression during observations (Frey, Nolen, Edstrom, & Hirschstein, 2005). In Norway, Second Step participation was related to higher ratings of social competence and lower ratings of externalizing behavior (Holsen, Smith, & Frey, 2008).

Promoting Alternative Thinking Strategies

The Promoting Alternative Thinking Strategies (PATHS; Greenberg & Kusche, 1993) program is the most comprehensive of the three reviewed here. It emphasizes that children’s aggression is the result of the dynamic interplay of several constructs, including affect and emotion language, manifest behavior, cognitive processes, and communicative skills. Thus, PATHS takes a multipronged approach to targeting behavioral and emotional difficulties. In particular, it incorporates prosocial skill-building, problem-solving, emotion understanding, and emotion regulation skill-building techniques into a comprehensive package taught by classroom teachers to elementary-school-aged children in weekly lessons throughout the school year. The program includes an explicit focus on the development of prosocial behaviors and social skills, and it includes activities designed to improve communication among peers and build friendships between children. Much like Second Step, PATHS also includes a social-cognitive component that teaches children to “stop and think” when they encounter difficult social situations, and then to progress through SIP-like steps. Next, PATHS lessons target emotion understanding by helping children identify and label emotions in themselves and others. Special tools like an emotions thermometer help children assess and describe the intensity of their feelings. Finally, emotion regulation skills are highlighted in the lessons. Children learn the “turtle technique,” which teaches them to go into a “shell,” count to 10, take a deep breath, and then express how they’re feeling in a calm way. Other featured emotion regulation skills include delaying gratification, controlling impulses, reducing stress, and using self-talk. Finally, the curriculum includes a supplemental unit that emphasizes generalization of skills. Integration with academic classroom lessons, playground time, and other peer-related settings encourages students to extend key concepts for use throughout the day.

Several trials have evaluated the efficacy of the PATHS program both in the United States and abroad. In an early trial, Greenberg, Kusche, Cook, and Quamman (1995) found that children who participated in the PATHS program showed significant improvements in their emotional understanding and expression, social skills, and peer relations relative to their peers in the control group. PATHS was also evaluated as part of the Fast Track Program, a comprehensive intervention targeting aggression as well as social and academic competence. Peer reports and
observational data suggested that children who participated in the PATHS curriculum were less aggressive than their counterparts in the control group. In addition, results suggested that program effectiveness was related to the quality of implementation (Conduct Problems Prevention Research Group, 1999). The PATHS program was later evaluated in a Scottish primary school (Kelly, Longbottom, Potts, & Williamson, 2004) and five schools in the United Kingdom (Curtis & Norgate, 2007). Results suggested improvements in behavioral and emotional functioning, including emotion vocabulary, cooperation, empathy, self-control, and peer relations.

The Rochester Resilience Project

Although the Rochester Resilience Project (Wyman et al., 2010) is not as comprehensive as PATHS, of the three programs described, it is the most focused on anger and anger regulation. In this program, school-based mentors teach children a hierarchical set of skills focused on emotion self-monitoring and regulation in 14 weekly lessons for which children are pulled from their regular education classrooms. The lessons emphasize three skills taught through adult-led activities and real-time practice in natural settings. The first skill involves monitoring one's own and others' emotions. Children are taught emotional vocabulary and cues to identifying feelings in the self and other. The next skill concerns emotion regulation; children are taught self-control and tools for reducing the escalation of emotion, such as a "feelings thermometer" to depict emotion intensity and the concept of using "mental muscles" to gain control over emotions. Finally, the third skill helps children to maintain control of their emotions while working through difficulties with peers. Deep breathing, stopping to think, and using an "imaginary umbrella" to protect against hurtful words are taught to improve children's objectivity and emotion regulation during interpersonal conflict.

The efficacy of the Rochester Resilience Project was tested in an initial trial of 226 kindergarten to third-grade children (Wyman et al., 2010). Students were rated by their teachers on social and emotional functioning before and after the intervention, and office disciplinary referrals were collected pre- and postintervention. Children who received the intervention showed improvement in teacher-rated task orientation, behavior control, assertive behavior, and peer social skills compared to their peers in the control group. In addition, children who participated in the intervention had reduced office disciplinary referrals and out-of-school suspensions during the 4-month intervention period.

EXPANDING THE FOCUS ON ANGER IN INTERVENTIONS FOR AGGRESSIVE CHILDREN

Greater Exposure to Angry Feelings

As can be seen from the description of these three programs, there has been a steady increase in the focus on emotion understanding and regulation in intervention programs for aggressive children. To some extent, these programs also target the specific
emotion of anger and its regulation. However, in our view, these programs would benefit from a greater focus on exposure to angry feelings within the context of the intervention. Thus, after children have been taught basic skills for recognizing and regulating their angry feelings, situations could be structured within the context of the intervention group that would purposefully elicit angry feelings in children. Adult leaders could then encourage children to practice their developing anger regulation skills, while coaching and supporting as much as is necessary. For example, children could be asked to negotiate the allocation of scarce resources or to play competitive games. If a group of aggressive children must divide up too few snacks, decide who gets to play with a handheld video game first, or handle losing a game, the opportunity to practice anger regulation skills will arise almost without fail.

Exposing children to actual anger-inducing experiences provides them with an opportunity to practice their anger regulation skills online. Role-plays and other forms of simulated practice are important in the initial stages of teaching children skills and techniques for regulating anger. However, we should also challenge children to use their emerging anger regulation skills in the moment in situations where they experience high levels of angry arousal.

Creating interventions that incorporate these types of anger-inducing situations will require substantial innovation, planning, foresight, and courage. And, clearly, opportunities for children to practice anger regulation skills online would need to be accompanied by considerable support, coaching, and scaffolding. We believe, though, that this sort of real-world practice is at the heart of what is missing from current approaches to teaching children how to regulate their anger. And, it may be the key to obtaining faster and longer lasting generalization of anger regulation skills from the treatment setting to home and school environments.

Why, then, have we shied away from exposing children to their strong angry feelings in the context of our intervention programs? One possibility is that the taboo against anger that exists in our society is being perpetuated by the very researchers who study and treat children’s aggression. In spite of encouraging children to believe that “all feelings are okay,” many of us do not feel comfortable with children’s anger, especially if we feel responsible for it. We may even believe that the goal of our intervention programs is to prevent children from ever becoming angry, rather than teaching children adaptive ways of coping with the anger that they all experience. Our goal should be to help children learn effective and constructive ways to manage angry feelings, rather than pursuing the unrealistic goal of banishing angry feelings altogether.

It is also likely that we have avoided giving children full-fledged opportunities to practice their anger regulation skills in our interventions because we (and our institutional review boards) worry about the ethics and pragmatics involved in doing so. When children become angry, they are sometimes going to resort to aggression, no matter how much coaching and scaffolding we provide. How do we keep all of the children in our intervention groups safe under these circumstances? Many of us are already taking efforts to manage naturally occurring anger and aggression within our therapeutic groups. Anyone who has worked with groups of aggressive children has experience in planning for the disagreements and scuffles that inevitably result. Most of us use as much scaffolding, praise, and support as possible, but we also use as many time-outs and as much “safe holding” as necessary. We also make sure that our groups are adequately staffed to allow for individual attention when children
require it. Planning for exposure to anger is not really any different from planning for these naturally occurring altercations; in fact, it is in some ways easier, because we can more readily predict when aggressive episodes may occur.

The risks involved in exposing children to anger are obvious. However, in our opinion, the benefits may well justify these risks. Only when children are placed in actual anger-provoking situations are they allowed the opportunity to practice their anger regulation skills, to learn that they can actually control their angry feelings, and to experience the power of feeling angry but not resorting to aggression. These experiences provide much more than a chance to habituate to angry feelings; they provide practice in the challenge of regulating anger. Moreover, in the cognitive-behavioral tradition, these experiences may fundamentally change the meaning of anger for aggressive children. Through successful experiences such as these, aggressive children may learn that anger is something that they can control, not something that controls them. For all of these reasons, we suggest that interventions for aggressive children would do well to include greater exposure to angry feelings.

Assessment of Anger as an Outcome of Interest

Additionally, we believe that researchers should more systematically assess constructs related to children’s anger and its regulation when evaluating the efficacy or effectiveness of programs designed to reduce children’s aggressive behavior. The constructs most often assessed when evaluating these programs include (a) aggressive behavior, (b) social-cognitive variables such as hostile attributional biases or problem-solving response generation, (c) broad measures of prosocial behavior or social skills, (d) global assessments of externalizing and internalizing psychopathology, or (e) broad measures of social-emotional functioning. Beyond these constructs, we believe that measures of anger and its regulation should be assessed more explicitly. For example, Sukhodolsky, Kassinove, and Gorman (2004) suggest including self-report measures of anger intensity and arousal. Additional self-report measures of self-monitoring for angry feelings may also be important to include, as may teacher-, parent-, or peer-report measures of overt anger expression. These measures would allow us to more carefully assess the impact of our intervention efforts on children’s anger and its regulation.

Moreover, it may prove helpful to assess both reactive and proactive subtypes of aggression separately as outcome measures when evaluating interventions for young children’s aggression. This assessment approach may bring us closer to an understanding of whether our intervention programs are succeeding when they aim to target children’s anger explicitly and whether they are effective at targeting reactive aggression in particular. Of most interest, they may help to reveal whether reductions in children’s anger and increases in children’s anger regulation skills mediate outcomes for reactive aggression.

CONCLUSION

In conclusion, our field has made significant progress as we have worked to develop more effective intervention programs for young children struggling with
aggressive behaviors. A notable development has been an increasing focus on the need to include emotion understanding and regulation as critical targets of these programs. Substantial strides have been made as we work to focus on anger more specifically as an essential emphasis in our work with young aggressive children. However, more work remains to be done. In the last section of this chapter, we have highlighted two important goals for the future: exposure to anger as a critical component of interventions for aggressive children, and assessment of outcomes related to anger when evaluating these programs.

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