

---

## **DEALING WITH FEELINGS: HOW CHILDREN NEGOTIATE THE WORLDS OF EMOTIONS AND SOCIAL RELATIONSHIPS**

---

*Susanne A. DENHAM\**

---

George Mason University, Department of Psychology, Fairfax, VA USA

---

### ***ABSTRACT***

*This review details the developmental progression of emotional competence from preschool age through middle childhood, and provides extant evidence for its relation to social competence, mental health, and academic success. Intra- and interpersonal contributors to emotional competence are then detailed. Within interpersonal contributors, the relational context in which socialization takes place – whether parent-child, teacher-child, peer group, or friendship dyad – is first considered. Finally, extant information is detailed on the modeling, contingency, and teaching mechanisms of socialization of emotions within these relationships. The review ends with a discussion of hoped-for continued advances in research and applications of this vital set of abilities.*

**KEYWORDS:** *emotional competence, social competence, relationships, early childhood, middle childhood.*

Children's need to master emotional and social developmental tasks, in order to succeed in school, has been highlighted recently by both researchers and policy analysts (Huffman, Mehlinger, & Kerivan, 2000). In this article I seek to elucidate the key elements of emotional competence, its relation to social and academic success, and the ways in which adults and peers contribute to its development, from theoretical, research, and applied perspectives. To begin, I offer a preliminary definition of emotional competence: "Emotional competence" includes expressing emotions that are, or are not, experienced, regulating emotions in ways that are age and socially appropriate, and decoding these processes in self and others (Halberstadt, Denham, & Dunsmore, 2001). Importantly, these skills and attributes play a central role in the development of pathways to mental health

---

\* Corresponding author:  
E-mail: sdenham@gmu.edu

and risk, as well as social and academic success, from foundations laid during preschool and gradeschool. To understand these connections, one need only consider the key social developmental tasks of each age period.

One of preschool-aged children's most important developmental tasks is achieving sustained positive engagement with peers, while managing emotional arousal within interaction and beginning to meet the social expectations by persons other than one's parents (e.g., teachers' evaluations, peer status; Gottman & Mettetal, 1986; Parker & Gottman, 1989). Arguments must be resolved so that play can continue; enjoying one another's company greases the cogs of sustained interaction. The processes inherent in succeeding at these social tasks call repeatedly for skills of emotional competence. Coordination of play is the preschool child's overriding goal. Serving this goal are social processes of common-ground activity, conflict management, creation of a "me too" climate, shared fantasy, and amity (i.e., achieving good will and harmony). The components of emotional competence help to ensure that such effective, successful social interactions are built upon specific skills such as listening, cooperating, appropriate help seeking, joining another child or small group, and negotiating. Young children must learn to avoid the disorganization of a tantrum, to think reflectively, rather than perseveratively, about a distressing situation, so emotion regulation is especially important. The young child who succeeds at these central developmental tasks is in a good position to continue thriving in a social world: Successful, independent interaction with age-mates is a crucial predictor of later mental health and well-being, beginning during preschool, continuing during the grade school years when peer reputations solidify, and thereafter (Denham & Holt, 1993; Robins & Rutter, 1990)

The goals, social processes, and emotional tasks central to social competence change radically from preschool to gradeschool (Gottman & Mettetal, 1986; Parker & Gottman, 1989); in fact, the very nature of adaptive social functioning changes as the child develops (Zeman & Shipman, 1996). That which is useful in the coordination of interaction during the preschool years may not lead to meeting one's goals during middle childhood; changes in the nature of social competence and in central social relationships are accompanied by parallel reorganizations of the ways in which children deal with emotional issues. Instead of learning to rein in vivid emotions, gradeschoolers acutely desire to avoid embarrassment, and reject sentiment in favor of logic. In particular, older children become aware of a wider social network than the dyad; peer norms for social acceptance are now complicated and finely tuned (Sullivan, 1953; Parker & Gottman, 1989). This is "the world is other kids" era. Inclusion by one's peers and avoiding rejection or embarrassment are paramount. The socially competent response to a number of salient social situations such as group entry and provocation or teasing is to be somewhat wary, cool, and unflappable. Social processes of gossip, amity, social support, relationship talk, self-disclosure, and information exchange serve this goal. Conversation assumes great importance, perhaps carrying the weight of earlier, more overt, emotionality (Gottman &

Mettetal, 1986). Managing how and when to show emotion becomes a crucial issue, as does knowing with whom to share emotion-laden experiences and ideas. Again, emotional competence is key in social success.

Several theorists highlight the interdependency of emotional and social competence (Campos & Barrett, 1984; Denham, 1998; Parke, 1994; Saarni, 1999). The interpersonal function of emotion is central to its very expression and experience, its very meaning. Conversely, social interactions and relationships are guided, even defined, by the emotional transactions within them (Halberstadt, Denham, & Dunsmore, 2001). In short, emotional and social transactions are intimately intertwined, and, we would argue, become even more so with development. Children's *emotional* competence supports their growing *social* competence, and vice versa. In fact, it makes sense to unite the two competencies as "affective social competence" (see Halberstadt et al.'s new model of just such a union). Unfortunately, however, the highly productive literature on peer relations still lags somewhat in integrating explicit elements of emotional competence into its models (Crick & Dodge, 1994; Ladd, 1999; but cf. Hubbard & Coie, 1994; Lemerise & Arsenio, 2000).

Emotional competence is also important from a mental health perspective. Externalizing and internalizing behavior disorders cause untold difficulty for parents, teachers, children themselves, and societies as a whole (Campbell & Ewing, 1990). Research on these problems during elementary school repeatedly mentions emotional factors (e.g. Dadds, Sanders, Morrison, & Rebetz, 1992; Denham et al., 2000). Moreover, such emotion-related descriptors often predict continuity of such behavior problems (Robins & Rutter, 1990; Werner, 1989). Thus, when developmental milestones of emotional competence are not negotiated successfully, children are at risk for psychopathology, both concurrently and later in life (Denham, Zahn-Waxler, et al., 1991; Rubin & Clark, 1983; Sroufe et al., 1984; Zahn-Waxler, Iannotti, Cummings, & Denham, 1990). Mental health policy analysts (e.g., Knitzer, 1993) are calling for the study of emotional competence, and for primary and secondary interventions for children at risk for deficits. More and more evidence-based prevention and intervention programming is being tested and promoted in early childhood education (Denham & Burton, 1996, 2003; Domitrovich, Cortes, & Greenberg, 2007; Frey, Hirschstein, & Guzzo, 2000; Izard, 2002b; Izard & Bear, 2001; Webster-Stratton & Taylor, 2001). A detailed review of such programming and extant early childhood assessment tools for emotional and social competence can be found in Denham and Burton (2003; see also Joseph & Strain, 2003).

Further, emotional competence also supports cognitive development, preacademic achievement, school readiness, and school adjustment, both directly, and indirectly, through its contributions to social competence and self regulation (Blair, 2002; Carlton & Winsler, 1999; Greenberg & Snell, 1997). Children who enter kindergarten with more positive profiles of emotional competence, as well as well-developed skills of social competence and self regulation, have not only more success in developing positive attitudes about and successful early adjustment to

school, but also improved grades and achievement (Birch, Ladd, & Blecher-Sass, 1997; Ladd, Birch, & Buhs, 1999; Ladd, Kochenderfer, & Coleman, 1996). In particular, when children enter school with friends, are well liked, are able to make and sustain new friendships, and are able to initiate positive relationships with their teachers, all of which are supported by emotional competence, they also feel more positive about school, participate in school more, and achieve more than children who are not described this way. In contrast, children who are victimized by peers or who are angry and aggressive have more school adjustment problems and are at risk for numerous problems, including school difficulties with academic tasks. Later on, they are more likely to drop out and persist in their antisocial behavior, such as delinquency and drug abuse (Gagnon, Craig, Tremblay, Zhou, & Vitaro, 1995; Haapasalo & Tremblay, 1994; Kochenderfer & Ladd, 1996; Raver & Knitzer, 2002). In short, social and emotional factors, such as emotion knowledge, emotion regulatory abilities, social skills, and nonrejected peer status – all of which are aspects or sequelae of early emotional competence – often uniquely predict academic success, when other pertinent factors, including earlier academic success, are already taken into account (Carlton, 2000; Howes & Smith, 1995; Izard et al., 2001; O'Neil, Welsh, Parke, Wang, & Strand, 1997; Pianta, 1997; Pianta, Steinberg, & Rollins, 1995; Shields et al., 2001).

Because emotional competence is so important, both in its own right, and because of its major contribution to social competence, ties to mental health, and both direct and indirect contributions to school success, the major goals of this article are to fully describe: (a) the separate components of emotional competence – emotional experience and regulation, emotional expressiveness, and emotion knowledge; as they develop through the preschool and primary school periods (b) the research knowledge base regarding each of these facets – their manifestations during early childhood, as well as how they relate to successful social development and school success; and (c) the direct and indirect contributions of each aspect of emotional competence, to both social competence and school success. After these descriptions, I summarize the promotion of emotional competence by parents, teachers, and others. Finally, ideas for future research and applied considerations are considered. First, then, is a more detailed consideration of the general nature and specific manifestations of emotional competence during the early childhood timeframe.

## **THE ELEMENTS OF EMOTIONAL COMPETENCE**

Emotional competence, or its lack, is central to children's ability to interact and form relationships with others (see also Parke, 1994; Saarni, 1999). These abilities develop through the lifespan. Preschool and school-aged children are becoming adept at several components: (a) awareness of emotional experience, including multiple emotions; (b) discernment of own, and others', emotional states; (c) emotion language usage; (d) empathic involvement in others' emotions; (e) regulation of own aversive or distressing emotions; (f) realization that inner and

outer emotional states may differ; and (g) awareness that social relationships are in part defined by communication of emotions.

Although often considered from the perspective of individual experience, skills of emotional competence are vividly played out in interaction and within relationships with others; emotions are inherently social in at least three ways (Campos & Barrett, 1984; Denham, 1998; Parke, 1994; Saarni, 1999). This interpersonal function of emotion is central to its very expression and experience, its very meaning. Many emotion theorists currently take a functionalist view of expressiveness -- what, specifically, does the expression of emotions "do for" a child and his/her social group? Most importantly, the expression of emotion signals whether the child or other people need to modify or continue their goal-directed behavior (Campos, Mumme, Kermoian, & Campos, 1994).

First, in terms of interpersonal nature of emotions, the behaviors of other individuals in one's social group often constitute the antecedent conditions for a child's emotions. When a friend approaches the player with a sad, diffident demeanor, it was because he had been often "left out". At the same time, information about one's own emotions can shape the child's own behaviors with others. An example is anger -- if a girl experiences anger while playing at the puzzle activity table with another, she may try to avoid the other child the next day, and even tell her mother "I don't want *her* to come to my birthday party." The experience of anger gave her important information that affects her subsequent behavior. Second, when a child exhibits emotion within a social dyad or group, this very emotional expressiveness is important information not only for him or her, but also the other dyad or group members. A child is often irritable and easily provoked, striking out at those he perceives to be "in his way." His peers, observing these emotional behaviors, wisely seek to stay out of his way. Third, one child's expression of emotion may form the antecedent condition for others' own experience and expression of emotions. Playmates exiting from the "grouch's" wrath may feel some combination of discomfort at his uncontrolled display, fear at his targeted nastiness, answering anger, and even spiteful delight if he *doesn't* get his way. Conversely, social interactions and relationships are guided, even defined, by the emotional transactions within them (Halberstadt, Denham, & Dunsmore, 2001). In short, emotional and social transactions are intimately intertwined, and, we would argue, become even more so with development.

In this article I focus on basic components of emotional competence, crucial for success in preschool and older children's social developmental tasks: experiencing and regulating, expressing, and understanding emotion. Although intertwined, each of these components follows a partially independent developmental path. I consider each in turn.

## EXPERIENCE AND REGULATION OF EMOTIONS

“Experience of emotions” is not only the awareness and recognition of one’s own emotions, but also the effective regulation of one’s emotional expression in the context of an ongoing social interaction (Halberstadt et al., 2001). What happens when children (or anyone, for that matter) experience emotion? A two-fold process of emotional experience is useful in describing emotional experience (Denham, 1998). First, there is arousal. Something happens—an environmental event (as when a boy falls while playing street soccer), one’s own actions (as when he misses a goal), the actions of others (as when the bully comes up to ridicule), or even memories. Sometimes this arousal is limited to lower, more primitive brain systems—when the soccer player fell, emotion ensued automatically, along with attendant behavior—holding his knee, trying unsuccessfully not to cry.

After infancy, however, higher brain functioning becomes increasingly involved in emotional experience. Motivation and cognition often work together to strongly influence emotional experience, because individuals create an increasingly complicated network of desires and outcomes they want to attain. Arousal gives the child key information about these ongoing goals and coping potential, but the information needs to be understood, not just reacted to. How do a shy boy’s “stomach butterflies” impact his goal of joining play, if at all? What does this arousal mean? Does he acknowledge his wariness –“I feel a little scared, going up to these guys”? Before he felt any emotion, or others noticed any, the boy must attend to the event, comprehend and interpret it.

Such goal-related interpretations lead not only to felt emotions, but also to actions associated with each specific emotion, and new changes in arousal. Does a soccer-playing boy try to “deal with” his jitters so he seems a worthy teammate—taking a deep breath, making an effort to walk steadily? Do his regulation attempts work, so he really is calmer, with better chances for social, not to mention soccer, success? One’s ability to access and manage emotions, and to communicate them to others, may predict success of relationships.

Several important abilities within this element of emotional competence are postulated. The first ability is the simple recognition that one is experiencing an emotion. The valence of the emotion possibly is registered at this level of skill. This low-level awareness is necessary for higher-level abilities of understanding – what emotional signal am I sending to these other persons? How do my emotional signals affect them? Identifying one’s emotions accurately is important interpersonally, as well as intrapersonally. Next, one must comprehend one’s emotional experience within the constraints of the emotion scripts that are active, and the ongoing social context. Knowledge of feeling rules may guide children in selecting aspects of their emotional experiences on which to focus. The glee that a soccer player experiences at getting a goal is more complicated than it might appear at first glance. He may experience a mixture of delight, “macho” contempt, and fear when he almost doesn’t make it. The feeling rule, “when you win, you feel happy,” may help him discern his “true” emotional experience.

Part of understanding one's own emotions within the social context also is realizing that inner and outer emotional states may differ (i.e., sending more, less, or different affective messages than those which are felt, based on others' expectations; "I know I feel really scared, but I am going to put on a calm face so we can get through this"). Such attunement to one's own emotions may yield interpersonal benefits as well; children's similarities of emotional experience allow them to predict and read others' emotions. For example, realizing one's own use of display rules also can lead to the wisdom that others also use them.

### **Regulating Emotional Experience**

Regulation of emotional experience is required when emotions are aversive or distressing and when they are positive but possibly overwhelming; sometimes emotions also need to be amplified, for either intra- or interpersonally strategic reasons. Thus, emotion regulation is necessary when the presence or absence of emotional expression and experience interfere with a person's goals. This integrative definition is useful: "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). When the intensity, duration, or other parameters of the experience and expression of emotion are "too much" or "too little" to meet goals and expectations of the child and/or social partners, emotion regulation is needed (Cole, Martin, & Dennis, 2004; Denham, 1998; Saarni, 1999; Thompson, 1994).

To succeed at such emotion regulation, several abilities are key. One must experience clear rather than diffuse feelings, to know what to regulate. Managing "false" signals is also crucial (e.g., the approaching boy had a sudden "tummy rumble" as he neared the others, but ignored it as not pertinent). One also can use false self-signals to facilitate communication and achieve a goal – a falling boy feels mad at himself, as well as hurt—maybe he can "use" his anger to motivate a quick, albeit hobbling, recovery. In sum, children learn to retain or enhance those emotions that are relevant and helpful, to attenuate those that are relevant but not helpful, to dampen those that are irrelevant. Moderating emotional intensity when it threatens to overwhelm, enhancing it when necessary to meet a goal, and shifting between emotion states via coping help children to maintain genuine and satisfying relationships with others, pay attention to preacademic tasks, and learn the rules of both social and intellectual experiences in varying settings.

What do children do to regulate emotions? First, the experience of emotion (i.e., sensory input and physiological arousal) may need to be diminished or modulated. The child may modulate the emotional experience via self-soothing. Or, she may even alter the discrete emotion being expressed; for example, a child feeling anxious during group times in her preschool may smile to convince herself and others that she is happy. Others may avoid situations, or try to change them, to avoid overarousal. Perceptual and cognitive emotion regulation is also possible: a

child may relinquish a goal, choose a substitute goal, or think through new causal attributions, which help her to feel more comfortable in her world. For example, a preschooler who is sad about not going swimming may say to herself, “I didn’t want to go anyway.” Refocusing attention is a useful perceptual means of regulating emotional experience. When trying to join peers at play, a boy may focus on the game’s “props” rather than the two children whose higher social status makes him uncomfortable. Problem solving reasoning also can be particularly useful as a regulatory coping strategy. When another boy becomes irritated with his play partner, he may suggest a compromise that makes them both feel better. Finally, children also *do* things to cope with the experience of emotion—actively fix the problem, look for support from adults, lash out aggressively, or cry even harder to vent emotion or get help (Eisenberg, Fabes, Nyman, Bernzweig, & Pinuelas, 1994).

### **Experiencing and regulating emotion during the preschool period**

Little research has focused specifically on how preschoolers experientially conceive of emotion. However, more has been done with respect to emotion regulation. Caregivers are very important to its inception. Young preschoolers often need external support to become skilled at this element of emotional competence; their caregivers’ support allows their strategies to be maximally effective. For example, parents often assist their children in cognitive coping strategies children will eventually come to use themselves (e.g., purposely redeploying attention). They also use emotion language to help children state or construe (e.g., “this will only hurt a little”) their feelings, understand feedback about them, and process causal associations between events and emotions, all of which help enable a choice of coping responses. Adults also assist preschoolers in specific means of behavioral coping. They demonstrate active problem solving, and often structure the child’s environment for a better fit with the child’s abilities – for example, a father avoids arranging a play date with a certain child whom he knows will leave his son cranky and overstimulated.

Beginning to interact within preschool or child settings is a particularly important transition that taxes young children’s emotion regulatory skills. Play with peers is replete with conflict; unlike adults, preschool- and primary-aged peers are neither skilled at negotiation, nor able to offer assistance in emotion regulation. New cognitive tasks require sustained attention, and the challenges of classroom rules are hard to follow when a child is preoccupied with feelings. At the same time, the social cost of emotional dysregulation is high with both teachers and peers. Initiating, maintaining, and negotiating play, earning acceptance, and succeeding at literacy and numeracy skills, all require young children to “keep the lid on” (Raver, Blackburn, & Bancroft, 1999). Thus, because of the increasing complexity of young children’s emotionality and the demands of their social world—with “so much going on” emotionally--some organized emotional gatekeeper must be cultivated.



Preschoolers do make some independent efforts to regulate emotion. Adult support is still important, but emotion regulation is more and more a partnership as children become simultaneously more autonomous and more capable of cooperation. Even toddlers can use a few independent emotion regulation schemes, such as orientation of attention toward or away from a stimulus, self-distraction via physical self-comforting or self-stimulation, approaching or retreating from a situation, or cognitive and symbolic manipulations of a situation through play (Grolnick, Bridges, & Connell, 1996; (Stansbury & Sigman, 2000).

Next, young children slowly see connections between their emotion regulation efforts and changes in their feelings. Their awareness of the need for, and their use of, emotion regulation strategies increase. Increased cognitive ability and control of both attention and emotionality (Lewis, Stanger, & Sullivan, 1989; Lewis, Sullivan, & Vasen, 1987; Shonkoff & Phillips, 2000), assist them in these accomplishments. Their exclusive reliance on caregivers' help decreases, and their awareness of the need for, and use of, coping strategies increases. Over time, they see the connections between their emotion regulation efforts and changes in their feelings, and become more flexible in choosing the optimal ways of coping in specific contexts. Thus, they begin to use very specific coping strategies for regulation--problem solving, support seeking, distancing, internalizing, externalizing, distraction, reframing or redefining the problem, cognitive "blunting," and denial. Many such strategies are indeed quite useful for emotion regulation; they are sequentially associated with decreased anger (Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002). As a result, behavioral disorganization resulting from strong negative emotion decreases dramatically. Preschoolers' independent emotion regulation strategies appear to increase primarily as a function of cognitive development and socialization (Denham, 1998).

### **Experiencing and regulating emotion during middle childhood**

More research focusing on children's experience of emotion, and their ability to regulate it, has been done with children elementary school age and older. Researchers interviewing children older than approximately five to seven years of age have been successful in obtaining reports of emotional experience that are interpretably associated with both emotion elicitors and positive peer relations (e.g., Casey, 1993; Cassidy, Parke, Butkovsky, & Braungart, 1992; Griffin, 1995). Griffin asserts that after age five, children have increasing familiarity with even complex emotion terms like "pride" and "embarrassment," and are capable of the self-reflection needed to accurately report their occurrence. Despite such tantalizing efforts, little, if any, work has been done on how felt emotion itself influences emotion regulation.

Gradeschool-aged children do appear to use, and refine, the same sort of coping strategies as preschoolers—including problem-solving, support-seeking, distancing, internalizing, and externalizing, distraction, reframing/redefining, cognitive "blunting," and denial. They are aware of the multiple strategies at their

command. Some of these strategies are more adaptive in specific situations, or as specific styles of coping, than others, and children can fairly accurately discern these differences (Saarni, 1997). Older children also use more cognitive and problem solving behavioral coping strategies to effect emotion regulation, and rely less as they age on support seeking. Finally, children approaching preadolescence endorse distancing in cases where stress is not controllable. Saarni (1999) has posited that this age change is due to the abilities to appraise the controllability of emotional experience, to shift one's thoughts intentionally, to reframe situations, and to examine different aspects of the situation so that new solutions can be reached. These important cognitive and attentional foundations of emotion regulation contribute to the developmental changes observed in emotional competence from preschool to late middle childhood.

### **Implications of emotion regulation for getting along socially and academically**

It is clear that emotion regulation is a crucial ability for managing the demands of social interaction (Parker & Gottman, 1989). When the young child begins to regulate his or her own emotions, he or she begins to show more socially appropriate emotions (Kieras, Tobin, & Graziano, 2003). Further, specific emotion regulation strategies are related to specific social behaviors; for example, reliance on attention-shifting emotion regulation strategies is associated with low externalizing problems and high cooperation, whereas reliance on information gathering strategies is correlated with assertiveness (Gilliom et al., 2002). Not surprisingly, then, emotion regulation is related to having friends in preschool (Walden, Lemerise, & Smith, 1999), as well as to teacher-rated socially appropriate behavior in both preschoolers and primary school children (Eisenberg et al., 1993; Eisenberg et al., 1997; Eisenberg et al., 2001; Eisenberg et al., 2003). In contrast, lack of emotional and behavioral regulation as early as two years predicts externalizing problems at four years, even with aggressiveness at age two controlled (Rubin, Burgess, Dwyer, & Hastings, 2003). Lack of regulation of both exuberant positive emotions and fear, respectively, are related to preschoolers' externalizing and internalizing difficulties (Rydell, Berlin, & Bohlin, 2003). Negative dysregulation has also been found to related in expected directions to aggression, anxiety, and social skills even when verbal ability, age, emotion knowledge, and negative emotional expressiveness are covaried (Miller et al., 2006). In sum, children who regulate emotions capably are seen as functioning well socially by adults and peers, across a range of ages from preschool to the end of grade school. Inability to regulate emotions figures in the trajectory toward behavior difficulties at school entry and thereafter.

As already implied (Kieras et al., 2003), emotion regulation and expressiveness often operate in concert. Children who experience intense negative emotions, *and* are unable to regulate their expressions of such emotion, are especially likely to suffer deficits in their social competence (Contreras, Kerns, Weimer, Gentzler, & Tomich, 2000; Hubbard & Coie, 1994). Specifically, young

children who are most emotionally intense, and poorly regulate this intense emotion, show the most difficulty in maintaining positive social behavior and have more troubled relationships with peers (Eisenberg, Fabes, Guthrie et al., 1996; Eisenberg et al., 1995; Eisenberg et al., 1997; Murphy, Shepard, Eisenberg, Fabes, & Guthrie, 1999). In other research (Denham et al., 2003; Denham, Blair, Schmidt, & DeMulder, 2002), kindergarten teachers saw children who had shown much anger, *and* did not regulate it constructively during preschool, as having problems with oppositionality two years later, at the end of kindergarten. In contrast, good emotion regulation skills, which caring adults can teach, buffer highly emotionally negative children from peer status problems (Eisenberg, Fabes, Guthrie et al., 1996; Eisenberg et al., 1995; Eisenberg et al., 1997; Murphy et al., 1999).

In terms of the implications of emotion regulation for academic readiness, school adjustment, or other aspects of cognitive achievement, it seems clear that the goals of emotional experience and expression can compete with higher order cognitive processing demands. In particular, when the child regulates emotion in reactive ways, through withdrawal, hypervigilance, or venting, rather than through effortful processes involving higher cognitive abilities like memory, attention, and/or planning (e.g., problem solving, distraction, reframing the problem), these higher order cognitive abilities are underused and consequently underdeveloped (Blair, 2002; Shonkoff & Phillips, 2000). A girl's attention and energy for her entire three-hour morning in preschool is consumed with fussing about getting her way, her terrible cold, and who gets to play with certain toys; she probably doesn't have the cognitive "space" left over to attend to and process information about the stories, rhymes, and songs her teachers introduce. Thus, Howse, Calkins, Anastopoulos, Keane, and Shelton's (2003) findings that emotional and behavioral self-regulation in the kindergarten classroom predicted achievement scores are particularly encouraging.

## EXPRESSION OF EMOTIONS

Another key element of emotional competence is emotional expressiveness, or the sending of affective messages. These emotions must be expressed in keeping with the child's goals, but also in accordance with the social context. For the emotionally competent child, the goals of self and of others must be taken into account and coordinated. Thus, emotional competence includes *expressing emotions* in a way that is advantageous to moment-to-moment interaction and relationships over time. First, emotionally competent individuals are aware, at least at some level (see Barrett's notion of "appreciations", 1995) that an affective message needs to be sent in a given context. Perhaps the soccer player ruminates that someone else is a better player. The same boy inadvertently pokes him on the way to the pencil sharpener; the soccer player sends a high intensity message – "come closer at your own risk!"

But what affective message *should* be sent, for interaction to proceed smoothly? Children slowly learn which expressions of emotion facilitate specific

goals. Second, children must also come to determine the appropriate affective message for the given social context; what is appropriate in one setting or with one person may not be appropriate elsewhere. Jimmy learns that his whiny voice tones, downcast face, and slightly averted body posture are not associated with successful entry into play. The glee accompanying rough and tumble play outdoors is likely to be frowned upon inside the house by a parent. Young children also learn that the appropriate affective message is the one that “works” in a particular setting or with a specific playmate. Jimmy may learn that a smile and otherwise calm demeanor is the better key to unlock the door to shared play with others; on the other hand, if he needs to defend himself, an angry scowl may get a bully to back off, at least temporarily.

Third, children must also learn how to send the situationally appropriate, intended message convincingly. Method, intensity, and timing of sending an affective message are crucial to its meaning, and its eventual success or failure. Showing slight annoyance for a short while over a best friend’s winning a game is different than remaining very angry for days. As well, one must keep in mind the constraints of display rules. Both adults and age-mates also let children know what emotion is situationally appropriate at an early age. Finally, and most difficult, one must consider characteristics of interaction partners and their interpersonal interchange. Some situations, such as a raucous game of soccer, and some people, like Aunt Martha, “pull for” particular modes of emotional expressiveness.

Accordingly, it is vital to express clear, concise, nonredundant emotional messages. Often it is most productive to be “true to oneself,” to show what one feels, as in showing her anxiety at being lost in a store. But, nonetheless, real affective messages need to be managed – what affective message is relevant and helpful? During the preschool years, the task of managing “true” affective signals sent to others is particularly challenging – learning to use words rather than tantrums to convey displeasure, for example is a key developmental milestone (Kopp, 1989).

At times, however, it is necessary to manage “false” affective signals sent to others. There are times when real affective messages are not appropriate -- some are relevant to the situation but not the context, and some irrelevant ones need to be masked. Young children are beginning to realize that a person may feel a certain way “on the inside”, but show a different outward demeanor depending on the goals and rules of the given situation (Denham, 1998). In particular, they are learning that overt expression of socially disapproved feelings may be controlled, while more socially appropriate emotions are expressed. For example, if a boy showed only a little annoyance with his playmates about changing the goal of a game, but then smiled; his charm probably allowed him to get his way. As another example, disappointment and even rage at being reprimanded by a parent or teacher may be relevant – that is, the adult has indeed blocked the child’s goal, as when the teacher says it is time to clean up and stop playing – but such anger with adults is usually imprudent to express. So, when real affective messages are inappropriate, “false” messages also must be managed and one must keep in mind

the constraints of both self-protective and prosocial display rules. For example, if a boy controls his feelings of fear when the bully approaches, in favor of showing a neutral expression that masks his internal shakiness; this tactic may keep him safer. Finally, some emotions are not contextually relevant, and their expression is not strategically necessary – anxiety when playing a new game is probably irrelevant to the goal of having fun, and needs to be suppressed.

### **Expressiveness during the preschool period**

These aspects of expressing emotions competently differ for preschoolers and older children, however. Preschoolers' emotional lives become quite complex. They are aware of the need to send an affective message, and can express vividly all the "basic" emotions, such as happiness, sadness, anger, fear, surprise, and interest. Young children are learning to use such vivid emotional communication to express clear nonverbal messages about a social situation or relationship – for example, stamping feet or giving a hug. Further, they display complex social and self-conscious emotions, such as empathy, guilt, pride, shame, and contempt in appropriate contexts (Barrett, 1995; Denham, 1998). For example, they demonstrate empathic involvement in others' emotions--for example, patting a classmate when she falls down and bangs her knee. Older preschoolers also begin to show blended emotions. For example, after his best friend's leaves angrily, with the taunt of "You broke my truck--I be won't your friend anymore," Antonio feels and expresses a mixture of sadness, guilt, and anger -- a multifaceted amalgam of facial, vocal, postural, and behavioral indicators.

Young children's propensity to show these emotions also tends to become stable across time, and across some situations. Perhaps one child is often grumpy, almost always angry when crossed. Preschoolers also have a rudimentary awareness that an emotional message needs to be sent, and that there are important contextual differences about what to send or not send (e.g., Zeman, Penza, Shipman, & Young, 1997), but little work has been done on these facets of expressiveness at this age. We do know that preschoolers also begin to use, but do not completely understand, display rules and the ability to "dissemble" emotions, as in pretend play (Cole, 1986).

### **Expressiveness during middle childhood**

For children past the preschool period, emotions often are not expressed as directly and vividly as they were earlier. With time and experience, children in this age range learn that their goals are not always met by freely showing their most intense feelings. For example, they regulate anger due to the negative consequences they expect (Zeman & Shipman, 1996). They manage the expression of emotion according to the person with whom, and the situation in which, they are interacting. Along with the "cool rule" that mandates their more muted evidence of emotion within most social settings, older children's emotional messages can be

more complex, with the use of more blended signals, and better differentiated expressions of the social emotions. Much of their new ability to more clearly express (and experience) guilt, pride, and shame is buttressed by children's attributions of responsibility and normative standards. That is, their emotions reflect not just the outcome of their actions for their goals, but also complex attributions about the causes of emotion-eliciting events (Olthof, Ferguson, & Luiten, 1989). These social emotions undoubtedly impact the nature of their interaction and relationships although empirical evidence is sparse. Finally, and most difficult, older children begin to consider the *unique* characteristics of interaction partners and their interpersonal interchange (Halberstadt, Denham, & Dunsmore, 2001).

### **Implications of emotional expressiveness for getting along socially and academically**

At a simpler, more outcome-oriented, level, emotional expressiveness refers to the individual child's profile of frequency, intensity, and/or duration of both basic and complex emotions--happiness, sadness, anger, fear, guilt, and empathy, for example. Preschoolers' expression of specific emotions, especially their enduring patterns of expressiveness, relates to their overall success in interacting with peers (i.e., peer status) and to their teachers' evaluation of their friendliness and aggression. *Positive* affect is important in the initiation and regulation of social exchanges; sharing positive affect may facilitate the formation of friendships, and render one more likable (Denham, McKinley, Couchoud, & Holt, 1990; Park, Lay, & Ramsay, 1993; Sroufe, Schork, Motti, Lawroski, & LaFreniere, 1984). Conversely, *negative* affect, especially anger, can be quite problematic in social interaction (Denham et al., 1990; Lemerise & Dodge, 2000; Miller et al., 2006; Rubin & Clark, 1983; Rubin & Daniels-Beirness, 1983).

Children who show relatively more happy than angry emotions: (a) are rated higher by teachers on friendliness and assertiveness, and lower on aggressiveness and sadness; (b) respond more prosocially to peers' emotions; and (c) are seen as more likable by their peers (Denham, 1986; Denham et al., 1990; Denham, Renwick, & Holt, 1991; Eisenberg et al., 1997; Rydell et al., 2003; Sroufe et al., 1984; Strayer, 1980). Sadness or fear, whether observed in the classroom or in interaction with mother, is related to teacher ratings of withdrawal and internalizing difficulties (Denham et al., 1991; Rydell et al., 2003). Moreover, young children who respond to the emotional expressions of others by sharing positive affect and/or reacting prosocially to others' distress, are more likely to succeed in the peer arena; teachers and peers alike view them as more socially competent than their more antisocial, "mean" counterparts.

Finally, there is evidence (Denham et al., 2001) that emotionally negative preschoolers tend to engage with equally negative playmates, and show increasingly negative evaluations of social competence. Some forms of such emotional negativity can be quite context specific. "Gleeful taunting" may look

like positive expressiveness on its surface; when expressed during conflict, however, it is really a form of emotional aggression that predicts negative peer status and teacher ratings more strongly even than anger during conflicts (Miller & Olson, 2000).

In short, young children's own expressed emotions are related to evaluations of their social competence made by important persons in their widening world--happier children fare well, and angrier or sadder children worse. It is easy to envision why children's patterns of emotional expressiveness provide such potent intrapersonal support for, or roadblocks to, interactions with age-mates (Campos & Barrett, 1984). A sad or angry child, with nothing pleasing her, is less able to see, let alone tend to, the emotional needs of others. And it is no wonder when her peers flatly assert, as did one of our 3-year-old research participants, "She hits. She bites. She kicked me this morning. *I don't like her.*" Conversely, a happier preschooler is one who can better afford to respond to others.

In terms of the connection between emotional expressivity and academic readiness, school adjustment, or other aspects of cognitive achievement, Blair (2002) notes that young children's emotional expressivity has clear implications for brain developments associated with school success, particularly in those areas of the cortex involved in self-regulated learning. Such emotion-related areas of the brain also are more mature than more cognitive areas and thus are in key position to play a central role in self-regulation (Nelson, 1994).

The rapidity of onset, intensity, and duration of both positive and negative emotions are important to learning and self-regulation. In particular, children who express more positive emotions and moderately intense emotions overall are perceived by their teachers as more teachable, and they achieve more in school (Keogh, 1992; Martin, Drew, Gaddis, & Moseley, 1988; Palinsin, 1986). In fact, those who are less emotionally negative during interactions with the mothers on the first day of kindergarten show better academic performance through eighth grade (Morrison, Rimm-Kauffman, & Pianta, 2003). Positive emotion is conducive to task engagement and persistence, skills that serve the young school-aged child very well. In contrast, neurological processes associated with expression of negative emotion, particularly fear, interfere with cognition. Although the frequent incidence of intense anger is clearly deleterious to social relationships, its role in self-regulation is as yet less clear.

## UNDERSTANDING EMOTIONS

Understanding emotion lies at the heart of emotional competence, with both experiencing and expressing emotions contributing to understanding, and understanding contributing to both other aspects. Again, there are four components of this element of emotional competence. An initial appraisal that another person is sending affective information is necessary--missing such information definitely puts one at a disadvantage (e.g., if a boy misses the muted expressions of annoyance on his friend's face, he may gloat overmuch about learning to head a

soccer ball, to the dismay of both). Once perceived, the other individual's affective message must be interpreted. Then this information must be understood within the constraints of display rules and applied within the "ongoing flow" of the context. Using understanding of emotion during social interaction is complicated and difficult, and is perfected across the lifespan. The key here is receiving as clearly and nonredundantly as possible, the emotional messages of others. As well, what intensities of emotion are others conveying? Ability to use emotion language, and understanding other dimensions of emotions important in social interactions and relationships are also crucial (e.g., the time course of emotions, awareness that social relationships are in part defined by communication of emotions).

Realizing that inner and outer emotional states may differ, and that different individuals have differing emotional "styles," is also important. It is tricky to manage both true and false emotional signals from others. One must be able to ignore false affective messages if ignoring is advantageous to one's goals, or to accept them as real if that is advantageous. Conversely, managing others true signals can be tricky, too. A boy may notice his friend's attempts to mask pain and accept them, to allow him to save face. He must also: (1) pick up real, relevant, helpful messages; (2) ignore real but irrelevant messages; and (3) somehow deal with real and relevant but not helpful messages. In terms of real but not helpful messages, children have to decide whether to certain expressions are momentary "blips."

Understanding emotions during the preschool period. Preschoolers can name and recognize expressions for most basic emotions, identify common emotion-eliciting situations (Denham & Couchoud, 1990a). They can talk about emotions' causes and consequences, especially when ecologically valid measures are used (Denham & Zoller, 1991). When conversing spontaneously, they describe what makes their parents angry ("when I cry in bed"), what makes *them* happy ("messy toy room"), how their parents express emotion (slam!), what parents would do when a child was afraid ("get a night light"; Denham, 1997; Dunn & Hughes, 1998).

Finally, young children are acquiring the beginnings of even more sophisticated knowledge of emotion. They are becoming aware of equivocal emotions (some people love oatmeal, others would be angry to be served it), weighing conflicting expressive and situational cues of emotions, and using personalized information about emotional reactions (Denham & Couchoud, 1990b; Gnepp, 1989). They are just beginning to understand emotion regulation, display rules, simultaneity, and ambivalence; often they can grasp these concepts if assistive methods are utilized (Banerjee, 1997; Covell & Miles, 1992; Gordis, Rosen, & Grand, 1989; Josephs, 1994; Kestenbaum & Gelman, 1995; Peng, Pollock, Glasspool, & Harris, 1992; Wintre & Vallance, 1994). However, there are certainly limits to preschooler's understanding of emotions; in particular, despite their emerging abilities, they often remain wedded to either the outward expression or the eliciting situation when interpreting emotions, which of necessity hampers their accuracy (Hoffner & Badzinski, 1989).



### **Understanding emotions during middle childhood**

Intricate understanding of emotions blossom during this period (Harris, 1989; see also Pons & Harris, 2005). Children improve greatly in their understanding that different events elicit different emotions in different people, and that enduring patterns of personality may impact individualized emotional reactions (Gnepp, 1989; Gnepp & Chilamkurti, 1988); such skill furthers their ability in all four skills for this element of emotional competence. Moreover, they have a much clearer comprehension of display rules, both serving both prosocial and self-protective functions (Gnepp & Hess, 1986). In terms of the finer nuances of emotions in self and others, they are moving toward (1) more mature levels of understanding of multiple emotion experience (Harter & Buddin, 1987; Merrum Terwogt, Koops, Oosterhoff, & Olthof, 1986; Olthof, Meerum Terwogt, Van Eck, & Koops, 1987); (2) comprehending the time course of emotions and more sophisticated means to regulate them (Meerum Terwogt & Olthof, 1989; Saarni, 1997); and (3) greater understanding of moral emotions, with one special improvement their lessened likelihood of misattributing happiness to a guilty story character (Nunner-Winkler & Sodian, 1988). Taken together, these new abilities bode well for increased emotional competence as children mature. Understanding a peer's emotional experience allows one to respond accordingly, consonant with one's goals (Lemerise & Arsenio, 2000). For example, it is likely that these new understandings affect children's reactions to other individuals' displays of guilt and other social emotions and also their understanding of how others' perceive these emotions in themselves.

### **Implications of emotion knowledge for getting along socially and academically**

Because personal experiences and social interactions or relationships are guided, even defined, by emotional transactions (Arsenio & Lemerise, 2001; Denham, 1998; Halberstadt et al., 2001; Saarni, 1999), understanding of emotions figures prominently in personal and social success. Specifically, succeeding at a crucial development task of the early childhood period, moving into the world of peers (Gottman & Mettetal, 1986; Parker & Gottman, 1989), calls for emotion knowledge. For example, if a preschooler sees one peer bickering with another, and correctly deduces that the peer suddenly experiences sadness or fear, rather than intensified anger, she may comfort her friend rather than retreat or enter the fray. The youngster who understands emotions of others also should interact more successfully when a friend gets angry with him or her, and can be more empathic with a peer gets hurt on the playground. Talk about one's own emotions can aid in negotiating disputes with friends. Darrell knows that it can be helpful to tell Jessica, "Hey, I was the fireman first. Don't be so mean and make me mad".

In these ways, emotion knowledge supports young children's attempts to deal with and communicate about the emotions experienced by themselves and others, and allows them to selectively attend to other aspects of social experiences

(Denham, 1998). Accordingly, children from preschool to the early primary years, who understand emotions are more prosocially responsive to their peers, show more adaptive social behavior and rated as more socially competent by teachers and peers alike (Denham, 1986; Denham & Couchoud, 1991; Denham et al., 1990; Roberts & Strayer, 1996; Smith, 2001; Strayer, 1980).

More specifically, dyad members' emotion situation knowledge and child-friend emotion conversation are involved in conflict resolution, positive play, cooperative shared pretend, and successful communication (Brown, Donelan-McCall, & Dunn, 1996; Brown & Dunn, 1991; Dunn, Brown, & Maguire, 1995; Dunn & Cutting, 1999; Dunn & Herrera, 1997). Preschoolers' understanding of emotion expressions and situations are also related to use of reasoned argument with, and caregiving of, siblings (Dunn, Slomkowski, Donelan, & Herrera, 1995; Garner, Jones, & Miner, 1994). As well, preschoolers' spontaneous use of emotion language is related to higher quality peer interactions and greater peer acceptance (Fabes, Eisenberg, Hanish, & Spinrad, 2001; Garner & Estep, 2001). Further, young children's understanding of emotion situations is *negatively* related to nonconstructive anger during peer play (Garner & Estep, 2001). Finally, understanding mixed emotions in kindergarten is associated with understanding friends, as well as expecting teachers to react benignly to one's mistakes (Cutting & Dunn, 2002; Dunn, Cutting, & Fisher, 2002).

More recent research with slightly older children (Dodge, Laird, Lochman, Zelli, & Conduct Problems Prevention Research Group, 2002; Mostow, Izard, Fine, & Trentacosta, 2002) has shown that emotion knowledge contributes to social problem solving and/or skilled social behavior, which then predicts later social competence, particularly sociometric status with peers. Moreover, difficulties with emotion knowledge in first grade predict self-reported internalizing behaviors in low income fifth graders (Fine, Izard, Mostow, Trentacosta, & Ackerman, 2003) These new reports are exciting, in that they add longitudinal and school success elements to the current arguments, and show more about *how* emotion knowledge can augment children's performance with peers (i.e., via reasoning about social encounters and choice of positive social behaviors).

In terms of the contribution of emotion knowledge to school readiness and academic success, fewer research reports are available, but they are emerging. Recent studies have shown that emotion knowledge at the beginning of the Head Start year uniquely predicted, as did emotion regulation, year-end school adjustment (i.e., behavioral regulation, preacademic ability, compliance/participation, forming relationships, Shields et al., 2001). Further, emotion knowledge contributes to the prediction of later attentional and academic competence even after controlling for the effects of verbal ability (Izard, 2002a; Izard et al., 2001). In addition to the direct effects of emotion knowledge on academic outcomes, it also plays the role of mediator. In a longitudinal study of Head Start children, emotion knowledge in preschool mediated the effect of verbal ability on academic competence in third grade; that is, children with higher verbal

ability in Head Start had greater emotion knowledge, which predicted third grade academic competence (Izard, 2002b). More research in this area is sorely needed.

### **Lack of emotion knowledge and unsuccessful social interaction**

In contrast, preschoolers with identified aggression and oppositionality or peer problems have been found to show specific deficits in understanding emotion expressions and situations, both concurrently and predictively (Denham et al., 2003; Denham, Blair et al., 2002; Denham, Caverly et al., 2002; Hughes, Dunn, & White, 1998). Further, low income, predominantly African American, first graders' difficulties in understanding emotional expressions also were related to their problems with peers and social withdrawal, even when preschool verbal ability and self control measures were already accounted (Izard et al., 2001; Schultz, Izard, Ackerman, & Youngstrom, 2001; Smith, 2001). Miller, Gouley, Seifer, Zakriski, Egula, and Vergnani (2005) found, similarly, that low income children children's deficits in emotion knowledge were associated with lower sociometric status and self-reports of negative experiences with peers.

Difficulties in 3-year-old emotion understanding also predicted inability to attribute mixed feelings to victimizers in kindergarten (Dunn, Brown et al., 1995). Children with such difficulties may have more trouble understanding that victimizing another can yield both happiness (at one's power) and sadness (at the victim's distress). Arsenio, Cooperman, and Lover (2000) have extended these general lines of inquiry. In their study, aggression mediated the association between lack of emotion expression and situation understanding and lower levels of peer acceptance; that is, developmental delays in emotion knowledge predicted aggression, which was associated with peers' dislike. Emotion knowledge deficits' relation to aggressive behavior explained their relation to lower peer status. Although these results were contemporaneous, the patterns of association suggest that lack of emotion knowledge is associated with impairment in behavioral responses to playmates, and that these impaired behavioral responses are seen as unlikable by these same playmates. Among elementary school-aged children, deficits in emotion knowledge have been found to predict behavior problems (Cook, Greenberg, & Kusche, 1994).

Other research examines, in more detail, the implications of specific errors in emotion understanding made by young children, which may be pivotally related to risk for aggression problems, such as the hostile attribution bias (Dodge & Somberg, 1987). For example, Barth and Bastiani (1997) uncovered a subtle relation that may underlie aggressive children's social difficulties: preschoolers' mistaken perceptions (overattributions) of peers' expressions as angry--a recognition bias similar to the hostile attribution bias of later years were associated with negative social behavior. Errors in emotion understanding, especially such overattribution of anger, are also concurrently related to preschool aggression and peer rejection (Denham et al., 1990; Schultz, Izard, & Ackerman, 2000; Spence, 1987).

In sum, these patterns of results suggest that deficits in early childhood emotion knowledge are related to children's social and behavior problems preceding, and extending into, the primary grades. Boosting such emotion knowledge, and doing so before school entry, thus increases in importance. In the future, ascertaining these early social cognitive difficulties could make it easier to intervene with children before their difficulties with aggression become entrenched.

Finally, the interrelationships of all aspects of emotional competence must again be underscored (A.G Halberstadt et al., 2001). Emotion knowledge undoubtedly plays an important role in children's expressive patterns and their ability to regulate emotion; when a child knows, for example, that her playmate is delighted to have heaved the tricycle upright at last, she no longer is distressed herself, trying to figure out what to do with an angry friend. She can focus her attention on other aspects of the situation. Thus, because of the intricate interworkings of emotion knowledge, emotional expressiveness, and emotion regulation, it is no surprise that *both* deficits in emotion knowledge *and* under-regulated expression of anger at age 3 to 4 predicted difficulties with teachers and peers two years later, in kindergarten (Denham, Caverly et al., 2002). More evidence is needed about the ways in which emotion knowledge and regulation work together during this age range, so that early childhood educators can refine social-emotional programming.

#### **WHAT FUELS THE DEVELOPMENT OF EMOTIONAL COMPETENCE? INTRAPERSONAL CONTRIBUTORS**

Both intrapersonal and interpersonal factors impact the developing competencies described here. First, intrapersonal contributors no doubt are important; abilities and attributes of the children themselves can either promote or hinder emotional competence. For example, some children are blessed with cognitive and language skills that allow them to better understand their social world, including the emotions within it, as well as to better communicate their own feelings, wishes, desires, and goals for social interactions and relationships (Cutting & Dunn, 1999). A preschooler who can reason more flexibly can probably also more readily perceive how another person might emotionally react to a situation in a different manner than he himself would; for example some people really are fearful of swimming pools, even though they delight *me*. In a similar manner, children with greater verbal abilities can ask more pointed questions about their own and others' emotions (e.g., "why is he crying?"), and understand the answers to these questions, giving them a special advantage in understanding and dealing with emotions. A preschooler with more advanced expressive language also can describe his/her own emotions more pointedly -- "I don't *want* to go to bed! I am *mad!*" -- which not only allows him/her to get their emotional point across, but also allows for others to communicate with them.

Similarly, children with different emotional dispositions (i.e., different temperaments) are particularly well- or ill-equipped to demonstrate emotional competence. An especially emotionally negative child, for example, will probably find she has a greater need for emotion regulation, even though it is at the same time harder for her to do so. Such a double bind taxes her abilities “unhook” from an intense emotional experience (see, e.g., Eisenberg et al., 1993; Eisenberg et al., 1994; Eisenberg et al., 1997). Conversely, a child whose temperament predisposes him to flexibly focus attention on a comforting action, object, or thought, and shift attention from a distressing situation, is better able to regulate emotions, even intense ones.

### **Interpersonal Contributors: Socialization of Emotional Competence**

So, children come to their preschool years with particular intrapersonal factors well in place. These intrapersonal factors are either foundations of or roadblocks to emotional and social competence. If emotional competence is intimately related with so many positive outcomes for children, the question of its cultivation must be answered. What differences do our efforts make? How do we foster these emotional and social competencies that stand children in such good stead as they move into their school years? Much of the individual variation in the components of children’s emotional competence derives from experiences within the family and preschool or gradeschool classroom (Denham, 1998; Hyson, 1994). Important adults – and children – in each child’s life have crucial roles in the development of emotional competence.

Socialization of emotions is ubiquitous in children’s everyday contact with parents, teachers, caregivers, siblings, and peers. Friends become crucial during middle childhood (Sullivan, 1953; cf. Smollar & Youniss, 1982). All the people with whom children interact exhibit a variety of emotions, which the children observe. Further, children’s emotions often require some kind of reaction from their social partners, and intentionally teaching about the world of emotions is considered by some adults to be an important area of teaching (Dix, 1991; Eisenberg & Fabes, 1994; Eisenberg, Fabes, & Murphy, 1996; Eisenberg et al., 1994; Eisenberg et al., 1999; Gottman, Katz, & Hooven, 1997). These three mechanisms describe socialization of emotion: modeling emotional expressiveness, reactions to children’s emotions, and teaching about emotion (Denham, 1998; Denham, Grant, & Hamada, 2002; Eisenberg, Cumberland, & Spinrad, 1998; A.G. Halberstadt, 1991; Tomkins, 1991). Each of these mechanisms can influence children’s emotional expression, understanding, and regulation, as well as social functioning.

### **Emotional Development in Parent-Child Relationships**

Children’s relationships with their mothers and fathers are close dyadic relationships. In contrast to peer relationships and friendships, however, these

relationships are not symmetrical, but complementary (Youniss, 1980). The importance of this difference for emotional development can easily be gauged when considering that most children rarely comfort their parents or give advice to them when they have emotional problems. The complementary nature of the parent-child-relationship has implications for children's emotional competence in four (partially overlapping) respects.

First, parents are attachment figures for their children. Starting in infancy mothers and fathers are primary figures for support in times of pain, anxiety, or distress. As children grow older, the importance of this support gradually diminishes, but parents still play a major role for their offsprings' psychological functioning in times of need. A secure attachment to mother tended to promote the understanding of basic emotions (Denham et al., 2000; Laible & Thompson, 1998; Ontai & Thompson, 2002; Raikes & Thomson, 2006; Suess, Grossmann & Sroufe, 1992) and of mixed emotions (Steele, Steele, Croft & Fonagy, 1999) in the preschool period. As well, mothers of securely attached children provide a richer discourse about emotions to their children (see Teaching Socialization Mechanism). Further, secure children are more accepted by peers, involved in more reciprocal friendships marked by mutual responsiveness and lack of criticism, and less lonely (Kerns, Klepac, & Cole, 1996). Children with an insecure attachment to their mother (and their father) are at a particular risk to start fights and to act with hostility in conflicts in the early school years (DeMulder, Denham, Schmidt, & Mitchell, 2000; Wartner, Grossmann, Fremmer-Bombik, & Suess, 1994).

Second, parents are more experienced adults. In particular, parents also have a more advanced knowledge of emotions and of strategies for regulating them than children. Because of their broader life experience and their more sophisticated knowledge parents can teach children about appraisals of emotional events, about verbal labels for their inner experiences, and about antecedents and consequences of their expressive displays (Dunn, Brown, Slomkowski, Tesla & Youngblade, 1991).

Parents continue to be important supports for their children's growing emotional competence during primary school. For example, most school-age-boys still turned to their parents in order to share their fears over a monster story or a staged kidnapping at night (Rimé, Dozier, Vandenplas & Declercq 1996). A majority of elementary school children endorsed the genuine expression of anxiety, sadness and pain in hypothetical stories in which their parents were watching their emotional reactions (Saarni, 1988, 1989; Zeman & Shipman, 1996). But, starting in second grade, youngsters expected that their expressions of anger about third parties would meet an unfavorable response from their parents. These findings may, however, depend on the gender of child and parent. For example, boys in elementary school expected more negative reactions from their fathers than from their mothers when disclosing their sadness (Zeman & Garber, 1996).

### **Emotional Development in Interaction with Peers**

If parent-child relationships are asymmetrical and close, the child's relationship with the peer group is just the opposite – symmetrical and not close. Yet the peer group is expected to have a pervasive influence on children's emotional development for two reasons. First, peers are in a better position to understand the emotional life of their agemates than parents or children of other age groups because of their similarity (Dunn & Hughes, 1998; Shantz, 1983). Agemates argue at about the same socio-cognitive and moral level, face the same transitions and (normative) life events and share the same role vis à vis the (pre)school and its teachers (v. Salisch, 2000c). These similarities are expected to improve their understanding of their peers' situation, perhaps independent of individual differences due to level of development, personality, or upbringing.

Further, children create peer cultures with their own norms and values (Corsaro & Eder, 1990), among them the shared appraisal of emotion-eliciting events ("spiders are yucky" or "rollercoasters are fun"; see Hochschild, 1983). In addition, local peer groups tend to have explicit and implicit rules about the expression and the regulation of emotions. Most research of emotional competence within the peer group has focused on the difference between the experience and the expression of emotions. What is missing is a descriptive study which details peer influences on other aspects of children's emotional development, on their ways of appraising, experiencing and regulating specific emotions.

Consonant with the social developmental task of middle childhood, display rules in today's peer culture favor de-emphasizing the expression of most emotions. Peers tend to reject children who do not conform to their display rules about emotions. Accordingly, converging empirical evidence suggests that school-age children report that they would express anxiety and hurt to their peers only when it reached extreme intensities, or when it was visible from the outside, such as when bleeding (Saarni, 1988, 1989). Primary school children likewise expect more negative reactions when expressing sadness or pain in front of peer audiences than in the presence of their parents (Zeman & Garber, 1996). With respect to other specific emotions that are proscribed, children are particularly challenged to reduce expressions of anger with their peers, in favor of negotiation or reframing conflicting viewpoints. Frequent anger explosions or triumph over other children's failures are both associated with peer rejection (Volling, MacKinnon-Lewis, Rabiner & Baradan, 1993). Expressing envy at other children's achievements on a regular basis is likewise linked to peer rejection (Tassi & Schneider, 1997). Some of these expectations are gender-dependent; among school-age boys, only about one third report that they have shared their fears over a monster story or a walk at night with their peers or friends (Rimé, et al., 1996). In contrast, girls have reported more frequently that they would not show their anger at peers or teachers (Underwood, Coie & Herbsman, 1992).

Thus, in the early elementary grades, children become aware that the emotions they show with their "public self" need not coincide with what they feel

in their “private self.” They learn, in short, to adopt an “emotional front” (Saarni, 1988, 1989). As one ten-year-old put it: “When you are sad, then you put up a smile and go with the others and try to be normal” (Selman, 1980, p. 107). How do school-aged children learn to adopt these emotional fronts that are so important to them? They apply differing emotion regulation strategies to this end, such as *distancing oneself* from an anger-provoking peer and redirecting attention increased with age (Murphy & Eisenberg, 1996; Stegge & Meerum Terwogt, 1998; v. Salisch, 2000a). Problem solving is, however, most often chosen as the best coping strategy. Both distancing and problem solving entail not showing negative feelings to the peers. Externalizing, that is “blowing up”, is uniformly selected as the worst strategy for coming to terms with negative emotional experiences with peers; social gains in the peer group were seen only when the peers’ negative comments were ignored or the problem was tackled (Saarni, 1997). Although these “emotional fronts” make children’s expressions less genuine, they also have some positive aspects (see also Gottman et al., 1996), such as saving face. Further, children’s growing ability to hide their vulnerability in the face of bullies increases their ability to “survive” in a hostile environment. Managing these emotional requirements of the peer group can be a daunting progression throughout the gradeschool years, but stands the child in good stead for continued social success.

### **Emotional Development within Friendships**

Finally, what could be expected of a symmetrical but close relationship, in terms of its contribution to the child’s emotional competence? First, friendship and peer status should be differentiated (Hartup, 1999). Popularity is a unilateral concept, marking the opinions of the group about the individual, whereas friendship indexes a mutual, dyadic relationship. The child’s fit with group norms about discussing emotion, and group sanctions about expressiveness, may play into classmates’ evaluations of peer status. Friends’ emotions, on the other hand, are experienced “close up”; thus, contributions of friends’ emotions to the child’s expressivity (and other aspects of emotional competence) may be stronger than the peer group’s.

Friends are children’s “best bets” for confiding their emotional experiences, especially feelings of vulnerability (Saarni, 1988, 1989; Rose & Asher, 1999b). Friendships now attain a new quality of intimacy (Krappmann, 1996). Because tasks of middle childhood friendship include caring, concern, help, conflict management, forgiving, and affection, best friends are especially likely to disclose emotional understandings and experiences they may hide from peers, helping each other acquire emotional competencies (Asher, Parker, & Walker, 1996; Parker & Gottman, 1989). These private feelings can be appreciated with friends. Friends learn how support each other, even when the friend is often in a bad mood, when support means foregoing more attractive leisure time options (Selman, 1980), or when it endangers the public self-presentation before the peer-group (as in friendships with agemates who are victimized by other peers).



Preadolescent's emotion-colored evaluations of their social life are compared, contrasted, and often validated by the friend (Gottman & Mettetal, 1986, Sullivan, 1953). Friends are able to help each other in sorting out which of their feelings are shared and which are purely idiosyncratic. Because self-disclosure is risky, trust that one friend will not divulge the other's secrets to others also becomes an important concern, along with jealousy and exclusivity (Grotperter & Crick, 1996). Reciprocal close friendships challenge preadolescents to be helpful to the friend in need, to not respond to her plight in an ignoring, hostile, or blaming way (Rose & Asher, 1999b). In Gottman and Mettetal's (1986) examples, one girl helps her friend by reframing her experience of the break-up of another friendship ("he wasn't worth it") and by giving her explicit advice on emotion regulation ("don't think about it any more"). Compared to older age groups, preadolescent friends tend to use distraction more often in order to keep their friends from ruminating over negative attributions that accentuate self-evaluative emotions, such as shame, guilt, self-hostility, or depression (Denton & Zarbatany, 1996).

Friends need to learn not only the skills necessary for the maintenance of intimacy, such as to express caring and concern, admiration and affection in appropriate ways, but also to manage disagreements which arise in the course of normal friendships (Asher et al., 1996). Conflicts of interests with the friend may challenge the youngster to regulate emotions of anger, sadness, envy, jealousy, shame, guilt and hurt feelings. Managing anger may be particularly important in this context. Gradeschoolers who endorsed revenge goals and adopted hostile strategies (such as verbal aggression or the threat to end the friendship) to hypothetical conflict scenarios quarreled more often in their best friendships and had fewer reciprocal best friends (Rose and Asher, 1999a). Findings from an observational study corroborate these results. In conflicts arising during a computer game, competitive friends expressed more anger, contempt, and disgust. Competitive friends also self-reported more intense feelings of anger and contempt, but also more intense experiences of shame and guilt, and, for girls, less fun (v. Salisch, 1999).

Thus, skills of emotional competence are supported by, and demonstrated within different social relationships. In the following sections I detail how socialization mechanisms promote children's emotional competence within these different relationships. Some gaps in the current literature exist, so that what follows includes all extant studies that could be isolated. More information exists on parents' role as socializers of emotional competence than on others' roles.

### **Socialization of Emotions: Modeling Mechanisms**

Children observe ever-present emotions of socializers, and incorporate this learning into their expressive behavior via a number of mechanisms (e.g., Denham, 1989; Denham & Grout, 1993; Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997). They are active social cognizers from early in life, observing the emotions of others, especially parents, and abstracting much about

the world of feelings. Emotions can “spread” via affective contagion. Others’ emotional displays also tell children about the emotional significance of differing events, the behaviors that may accompany differing emotions, and others’ likely reactions. Thus, the expressive patterns of others are associated with children’s abilities to understand others’ emotions as well as with their own expressiveness (Denham & Couchoud, 1990; Denham & Grout, 1993; Denham et al., 1997; Denham, Zoller, & Couchoud, 1994; Liew et al., 2003). During gradeschool, observation of others’ emotions informs emerging aspects of sophisticated emotion knowledge, such as understanding of complex emotions like guilt and shame, display rules and ambivalence, all of which complement the child’s new world of peers.

A mostly positive emotional climate makes emotions more accessible to children, in terms of their own emotion regulation, emotion knowledge, and concomitant positive social behavior. Thus, when children have experience with clear but not overpowering parental emotions (mostly positive), they also may have more experience with empathic involvement with others’ emotions (Denham & Grout, 1992, 1993; Denham et al., 1991; Denham, Renwick-DeBardi, & Hewes, 1994; Denham, Zoller et al., 1994; Gottman & Mettetal, 1986; Liew et al., 2003; Parke, Cassidy, Burks, Carson, & Boyum, 1992). Both middle- and low-income preschoolers’ emotion regulation is facilitated by their mothers’ appropriate expressiveness (Garner et al., 1994). Conversely, children whose mothers self-report more frequent anger and tension also are less prosocial, and less well liked than children of more positive mothers (Eisenberg et al., 2001; Eisenberg et al., 2003; Garner & Spears, 2000). Emotionally negative preschool classroom environments are also related to aggressive, disruptive peer behavior in second grade, especially for boys (Howes, 2000).

Furthermore, several researchers have begun a fruitful investigation of the contribution of parental emotion to children’s social competence, *as mediated by* children’s emotion expressed during interaction with parents. For example, Isley, O’Neil, Clatfelter, and Parke (1999) have found that parents’ positive affect during semi-naturalistic game playing was related to their kindergarteners’ social competence, as mediated by the children’s positive affect in interaction with their parents. Denham and Grout (1993) have reported very similar results with preschoolers, in terms of positive emotion. In contrast, parental negative affect had only a direct, negative contribution to children’s social competence (Isley et al., 1999). Sharing in angry interchanges with mothers and fathers can unfortunately help children become easily aroused in during social interaction, and/or learn an overly confrontational style, that carry over to peer aggression and avoidance (Carson & Parke, 1996; Denham & Grout, 1993). Isley and colleagues have found even more differentiated effects, in that parental affect is especially related to social competence for father-son shared negativity and maternal positive emotion. Jones and Eisenberg (1997) have found similar findings to those above, with older children.

Hence, clear and mostly positive emotional environments are associated with positive outcomes in young children's emotional expressiveness, emotion knowledge, emotion regulation, and positive social behavior. Much less research has clearly targeted the expressive modeling of teachers, however, despite the existence of observational ratings that can be used to capture the emotional environment in early childhood classrooms (Arnett, 1989; Harms & Clifford, 1980). Denham, Grant, and Hamada (2002) have, however, found evidence that the socialization of emotion of both preschool teachers and mothers is important for the development of children's emotion regulation; maternal expressiveness and teachers' attitudes about teaching young children about emotion, another component of emotion socialization, were the most important predictors of emotion regulation.

Conversely, parental expressiveness can make it more difficult for young children to address issues of emotion altogether. In particular, exposure to negative emotions expressed by adults in their lives can be problematic for young children. Although exposure to *well-modulated* negative emotion can be positively related to understanding of emotion, parents' frequent and intense negative emotions may disturb children, as well as discourage self-reflection, so that little is learned about emotions, other than how to express negativity (Denham, 1998)! It is easy to imagine the confusion and pain of children relentlessly exposed to parents' negative emotions; in the aftermath of such confusion and pain, children whose mothers self-report more frequent anger and tension also are more angry themselves, less prosocial, and less well liked than children of more positive mothers. As well, the trajectory from age two aggressiveness to age four externalizing problems is clearest for toddlers who experience high levels of maternal negative expressiveness (Rubin et al., 2003); thus, it may be that exposure to higher levels of parental negativity over-arouses the young child who cannot yet regulate emotions well, and represents a hostile-aggressive template for children to follow in their reactions to people and events. Cole, Teti, and Zahn-Waxler (2003) did in fact find that less mutual positive emotion, more mutual anger, and more emotional mismatches during a frustration task at preschool age predicted school age conduct problems, affirming the child's participation in such emotional processes.

At the same time, parents whose expressiveness is quite limited impart little information about emotions. In sum, with regard to modeling, exposure to parents' and other adults' broad but not overly negative emotions helps children learn about emotions and come to express similar profiles. In particular, whether in families or classrooms, adult negative emotion is deleterious to young children's emotion knowledge, profiles of expressiveness, emotion regulation, and social competence.

In contrast, friends learn much by watching each others' emotions in the unique situations of peer life—where gossip and avoiding embarrassment are so very important. Within this context, friends can value and validate each other's emotion-colored evaluations of their social experiences, and expressions of

emotion that conform to the local norms (Gottman & Mettetal, 1986, Sullivan, 1953). Friends learn not only the skills necessary for the maintenance of intimacy, such as to express caring and concern, admiration and affection in appropriate ways, but also to manage disagreements that arise in the course of normal friendships (Asher et al., 1996). Conflicts of interests with a friend challenge the youngster to regulate emotions of anger, sadness, envy, jealousy, shame, guilt and hurt. Managing anger is particularly important (Rose & Asher, 1999a; v. Salisch, 1999).

### **Socialization of Emotions: Teaching Mechanisms**

Socializers' tendencies to discuss emotions, and the quality of their communications about emotions, if nested within a warm relationship (parental or friendship), assist the child in expressing and regulating emotions. Socializers may draw attention to emotions and validate or clarify the child's emotion, helping the child to react to emotions and express them authentically, in a regulated manner (Denham & Auerbach, 1995). Whether socializers use emotion talk to clarify, teach, or share, rather than to modify the child's behavior or preach, also may be a critical distinction (Denham & Grout, 1992; Eisenberg et al., 1998). Although there are no studies on this type of "talk about feelings" for middle childhood, it can be assumed that when socializers (in this case, particularly parents, who have a broader knowledge base) speak to school-age children about matters relevant for emotional competence --complex or mixed emotions, masked emotions, strategies for managing emotions, such as redirection of attention or cognitive restructuring.

Accordingly, adult-child conversations about feelings are an important context for coaching children about emotions and how to express and regulate them (Bretherton et al., 1986; Brown & Dunn, 1992). Discussing emotions provides children with reflective distance from feeling states themselves, and space in which to interpret and evaluate their feelings and to reflect upon causes and consequences (Denham, Cook, & Zoller, 1992; Denham & Grout, 1992; Eisenberg et al., 1998; Gottman et al., 1997; Zahn-Waxler, Radke-Yarrow, & King, 1979). Verbal give-and-take about emotional experience within the scaffolded context of chatting with a parent or teacher helps the young child to formulate a coherent body of knowledge about emotional expressions, situations, and causes (Denham, Zoller et al., 1994; Dunn, Brown, & Beardsall, 1991; Dunn, Slomkowski et al., 1995). There is evidence that such associations between mothers' emotion language and preschoolers' emotion knowledge are often independent of the child's linguistic ability. Emotional communication in the family seems to be helpful for children's early emotional development, because the more time mothers spend with this type of teaching during first years of life the more advanced is their children's later emotional understanding (Brown & Dunn, 1996; Denham, Zoller & Couchoud, 1994), as well as their moral sensitivity (Dunn, Brown & Maguire, 1995). The particular type of emotion talk also may be important – empathy related statements, explanations about causes and consequences, and descriptions of

parents' own emotions, appear especially compelling for children and useful for parental coaching (Denham & Kochanoff, 2003; Garner, Jones, Gaddy, & Rennie, 1997).

Children of such emotion-coaching parents and teachers gradually formulate a coherent body of knowledge about emotions (Denham, Renwick-DeBardi et al., 1994; Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991). When parents discuss and explain their own and others' emotions, their children are more capable of empathic involvement with peers (Denham & Grout, 1992; Denham, Renwick-DeBardi et al., 1994; Denham, Zoller et al., 1994). The general trend of these findings also hold true for low-income, minority mothers and their children (Garner, Jones, Gaddy, & Rennie, 1997). Recent findings (Garner, 2006) suggest that maternal discussion of emotions is also related to emotion regulation in low income preschoolers.

In one study of children in child care transitions (Dunn, 1994), preschoolers remembered both sadness and fear during these times, as well as the support given them by teachers and friends, to help them feel better. So it is clear that young children absorb not only the content, but also the form and quality, of nonparental adults' emotion coaching; how can this content, form, and quality be characterized? Two recent investigations (Ahn, 2003; Reimer, 1996) (Ahn, 2003) revealed that teachers of toddlers and preschoolers also socialize children's emotions differently based age, tailoring their reactions to children's emotions, and their teaching about emotions, to the developmental level of the children. In Ahn's study, toddler teachers used physical comfort and distraction in response to children's negative emotions more often than did preschool teachers, who relied more on verbal explanations. Preschool teachers helped children infer the causes of their negative emotions, and taught them constructive ways of expressing negative emotion more frequently than did toddler teachers. Teachers of older children were also less likely to match the positive or encourage positive emotion, and more likely to discourage such displays. Finally, this study demonstrated that teachers did not validate children's negative emotion very often – one of the major tenets of emotion coaching; teachers clearly expressed a preference for positive emotion, through verbal reinforcement.

Reimer (1996) also found that teachers respond to about half of preschool children's emotions, most often in service of socializing emotion regulation; verbal references to children's emotions constituted about one-half of their responses. These teacher verbalizations referred to causes and consequences of the child's emotion, which emotions were appropriate, and how to express emotions under various circumstances. Overall, these recent studies suggest that, to promote emotional competence, teacher/caregiver training should focus on validating children's emotions, while at the same time creating and sustaining adult-child emotion conversations.

Friends may also teach their partners about emotions, although most of what follows has not been demonstrated empirically as of yet. Friends are children's "best bets" for confiding emotional experiences, especially feelings of

vulnerability (Krappmann, 1996; Saarni, 1988, 1989; Rose & Asher, 1999b). They are especially likely to disclose emotional understandings and experiences they may hide from others, helping each other acquire emotional competencies (Asher, et al., 1996; Parker & Gottman, 1989). Friends may use emotion talk in several ways. First, they partake in negative gossip to solidify their identities in the peer group, broaching the subject of potential insecurities without actually naming them (similar to fantasy play during the preschool period). One can imagine emotion talk occurring during such gossip, functioning within the put-downs (“She’s such a little cry-baby”) or statements of group norms (“I hate it when he blows up like that, don’t you?”). Second, they share amity and support–approval of their friend, sympathy, and affection could easily include emotion language. Third, relationship talk also goes on, along with self-disclosure; unsurprisingly, conflict processes often rear their not-necessarily-ugly heads–these aspects of conversation may be replete with emotion talk (Berndt, 1987). In fact, children probably converse with friends about the very aspects of emotion understanding undergoing rapid development at this age – knowledge of display rules, ambivalence, and complex emotions like guilt and shame.

### **Socialization of Emotions: Contingent Reactions**

Socializers’ contingent reactions include behavioral and emotional encouragement or discouragement of specific emotions (Fabes, et al., 1990; Tomkins, 1963, 1991). More specifically, adults may punish children’s experiences and expressions of emotions, or show a dismissive attitude toward the world of emotions, by ignoring the child’s emotions in a well-meant effort to “make it better” (Denham, Renwick-DeBardi et al., 1994; Denham, Zoller et al., 1994). In emotion-evoking contexts, children who experience negative reactions have more to be upset about–not only the elicitor, but also socializers’ reactions (Eisenberg et al., 1998, 1999). Positive reactions, such as tolerance or comforting, convey a very different message–that emotions are manageable, even useful (Gottman et al., 1997).

Positive reactions, such as tolerance or comfort, convey a very different message: that emotions are manageable, even useful (Gottman et al., 1997). Parents who are good “emotion coaches”, at least in the United States, accept children’s experiences of emotion and their expression of emotions that do not harm others; they empathize with and validate emotions. Regardless of the child’s age, emotional moments are seen as opportunities for intimacy (Denham & Kochanoff, 2003; Eisenberg & Fabes, 1994; Eisenberg, Fabes, & Murphy, 1996). As children develop their own effective emotion regulatory abilities, parents decrease the frequency, intensity, and nature of their reactions, in part because they are transferring responsibility for regulation from caregiver to child (Grolnick, Kurowski, McMenamy, Rivkin, & Bridges, 1998).

Though these reactions are still important both concurrently and across time, optimal reactions to older children’s emotions take a different form, allowing

for the child's autonomy and for heightened expectations of older children's behavior. Positively reinforcing the child's emotions (e.g., listening, accepting, querying, complying) may be more predictive of older children's emotional competence than overindulgent helping and comforting; some measure of restrictiveness may also have beneficial outcomes, in that older children need to know when emotions are appropriate and when they are not, and their emotions' effects on other people (Eisenberg et al., 1998; McDowell & Parke; 1998). Conversely, encouragement of expression of emotion may not be as predictive of emotional and social competence as it was for younger children.

Little or no research has been conducted on how peers socialize each other's emotions, but some data does exist for this socialization mechanism. However, Sorber (2001) did examine how kindergarten and third graders indicated that they would react to specific peer emotions via a computer story game. Happy characters were given the most approval, with angry characters given the least approval; acceptance of the various emotions (i.e., happy, sad, angry, and scared) was not based on gender stereotypes.

Close friends may challenge other preadolescents to be helpful to the friend in need, to not respond to her plight in an ignoring, hostile, or blaming way (Rose & Asher, 1999b). In this more horizontal friendship relationship, reactions to emotions that comfort ("Don't worry about that test. You'll do better next time") and exhort ("Stop crying—everybody's looking you!") may both predict emotionally positive profiles. We think it unlikely that friends' mildly punishing socialization will have deleterious effects equal to those of parents. Friends' reactions are less likely to cause increased arousal—friends are generally supportive equals, so their punitive reactions may usually have "more message" and "less fear." The social world of middle childhood also centers on conforming to stringent norms. In this context, friends' forthright reactions to a child's emotions might be quite necessary (Denton & Zarbatany, 1996). Friends can help each other sort out which of their feelings are shared, and which are purely idiosyncratic, for example.

### **Socialization of Emotions: Summary**

Thus, there is much more research on the ways in which parents respond to young children's emotions, as compared to the reactions of teachers, agemates (the overall peer group or friends). The clearest take-home message is that adults' and older siblings' optimal emotional and behavioral responses to children's emotions are associated with young children's own emotional expressiveness, emotion knowledge, and empathic reactions to peers' and others' emotions (Denham & Kochanoff, 2003; Fabes, Leonard, Kupanoff, & Martin, 2001; Fabes, Poulin, Eisenberg, & Madden-Derdich, 2003; Strandberg-Sawyer et al., 2003; Zahn-Waxler et al., 1979). For example, when mothers show benevolent patterns of reactions to children's negative emotions, children show less egoistic distress and more sympathetic concern to the distress of others. They have warm, empathic,

nurturant guides to follow in responding to others' distress (Denham, 1993; Denham & Grout, 1993). However, much more research is needed in this area, especially to elucidate the central prediction of links between parental reactions to children's emotions and children's patterns of emotional expressiveness, and of socializers other than parents.

## EVALUATION OF THE EMOTIONAL COMPETENCE LITERATURE

Where do we need to go from here? First, it should be obvious by now that much exciting work has been done, with many ways to expand upon it readily discernible. But how far have we come since Hubbard and Coie's seminal paper in 1994? Although our evaluations may be somewhat biased, it seems clear that we have *not*:

- Made much headway in the investigation of children's understanding and "live" experience of emotions.
- Agreed, as a discipline, on definition(s) of emotion regulation, and the means to measure it.
- Sufficiently plumbed the relation between use of display rules and social competence, despite the efforts of Zeaman and Shipman (e.g., 1996); in fact, the union of investigation of social and emotional competence still lags, in our view.
- Investigated the emotional world of primary- and middle childhood-aged children sufficiently, especially in comparison to the more easily accessible preschoolers; moreover, more work on emotional and social competence in the arena of middle childhood friendships is sorely needed.
- Examined these phenomena with minority, low SES children (with the exception of Garner's work, which often suggests that the emotional competence milestones, and their socialization, of low SES, minority children are similar to that of more affluent children).
- Uncovered possible gender effects, beyond main effects (which seem to be sparse); for example, the ways in which emotional competence contributes to social competence may differ for boys and girls (but see Eisenberg, Fabes, Shepard, et al., 1997).
- Given consideration to the notion that increasing emotional competence is not *always* beneficial for establishing and maintaining harmonious relationships. For example, even though a well-developed empathic sense might keep aggressors from attacking their victims, they might as well use it to enhance the effectiveness of their attacks. Similarly, developmental change in competence concerning envy, jealousy, and anger may impact social development in ways that make social relationships for harmonious.



These specific needs must be addressed in future research. Steps toward rapprochement of peer and emotions subdisciplines is a hopeful sign. For example, Lemerise and Arsenio's (2000) inclusion of emotions in Crick and Dodge's (1994) model of social information processing should spawn much fruitful work.

There are other, more overarching, areas that need attention. One problem area is cultural. Most of the studies reviewed so far come from the Western industrialized countries. This limits the generalizability of their results. A further limitation is measurement-related. Many studies of gradeschoolers use self-report measures, especially in the research on emotional competence in relationships to peers and friends. Self-reports are subject to various reporting biases, such as social desirability. Self-presentations also may be influenced by gender-role self-concepts or cultural styles of self-presentation. In addition, many investigations on emotional development in older children's peer relationships have used hypothetical vignettes, which are sometimes of a questionable ecological validity.

What is needed, therefore, is research, which corroborates self-reports with other measures of emotions, such as physiological measures or behavior observation, and compares answers to hypothetical situations with experiences and behavior in emotionally stimulating settings in real life. New, more ingenious methods need to be devised. For example, to measure experiencing and regulating, children could review videotapes of themselves, pressing a button when they were feeling (and showing or not showing) a feeling. They could describe their feelings and the reasons for them, as well as their means of regulation. For the measurement of expressiveness, children could view a videotape of social interaction, and press a button when an affective message needs to be sent. They could be asked, as well, what message should be sent? Emotional reactions to others can be measured within "created" situations in the laboratory or within real social settings – e.g., helping an older confederate, consoling an adult, and discussing the experience during a post-event interview (Denham, 1986; Saarni, 1992). For the measurement of understanding a child could press a button when she or he sees an affective message on a videotape, and identify it.

This type of research is especially needed for the study of peer influences (e.g. Denham, Mason, Caverly, Hackney & Caswell, in press) and for research on emotional development in middle childhood (e.g., Underwood, Hurley, Johanson & Mosley, 1999). In one of the few observational studies in this area, facial expressions of anger did not become less frequent with age, nor was a more subtle variant substituted for the full expression of anger (v. Salisch, 1997; cf. nonobservational studies of Zeman & Garber, 1996; Underwood et al., 1992). These findings underscore that self-report studies need to be supplemented with observational studies which cover a broad range of age-groups and emotion-eliciting situations (Underwood et al., 1999).

Another problem is one of integrating aspects of emotional competence in investigations, rather than centering on one or another. In the early years intrapsychic emotional development is closely linked with cognitive and moral development, and with the acquisition of language. A reciprocal relationship can

be assumed between the interpersonal and the intrapsychic tier of emotional development, in which influences are likely to travel in both directions. Intrapsychic representations such as an insecure attachment representation, lack of emotion understanding, or a hostile attribution bias, are likely to influence the expression of anger and hostility in interpersonal contexts, such as conflict situations (Barth & Sebastiani, 1997; Slomkowski & Dunn, 1996; Suess et al., 1992), and this behavior may ultimately lead to peer rejection. Conversely, interpersonal practices, such as the tendency to talk a lot about emotions in the family, are likely to promote children's intrapsychic understanding of (others') emotions (Denham et al., 1994; Dunn et al., 1991). A transactional model is necessary which sketches the reciprocal influences between the intrapsychic and the interpersonal level of emotional development, both concurrently and longitudinally.

Finally, we realize that at the interpersonal level, it is somewhat artificial to tease apart the differential influences of parents, peers and friends because most children take part in each of these kinds of relationships. In addition, some influences may not be specific to one type of relationship. Nevertheless, differentiating between the emotion components of appraisal, experience, expression, and regulation strategies and tracing the influences of different interpersonal relationships on the development of the emotion components seems to be a worthwhile undertaking for the future, considering how important emotions and relationships are to the participants.

## REFERENCES

- Ahn, H. J. (2003). *Teacher's role in the socialization of emotion in three child care centers*. Paper presented at the Society for Research in Child Development, Tampa, FL.
- Arnett, J. (1989). Issues and obstacles in the training of caregivers. In J. S. Lande, S. A. Scarr & N. Gunzenhauser (Eds.), *Caring for children* (pp. 241-255). Hillsdale, NJ: Lawrence Erlbaum.
- Arsenio, W. F., Cooperman, G., & Lover, A. (2000). Affective predictors of preschoolers' aggression and peer acceptance: Direct and indirect effects. *Developmental Psychology*, *36*, 438-448.
- Arsenio, W., & Lemerise, E. A. (2001). Varieties of childhood bullying: Values, emotion processes and social competence. *Social Development*, *10*, 57-74.
- Asher, S. R., Parker, J. G., & Walker, D. L. (1996). Distinguishing friendship from acceptance: Implications for intervention and assessment. In W. M. Bukowski, A. Newcomb, & W. W. Hartup, *The company they keep: Friendship in childhood and adolescence* (pp. 366-406). Cambridge: Cambridge University Press.
- Banerjee, M. (1997). Hidden emotions: Preschoolers' knowledge of appearance-reality and emotion display rules. *Social Development*, *15*, 107-132.
- Barrett, K. C. (1995). A functionalist approach to shame and guilt. In J. Tangney & K. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 25-63). New York, NY: Guilford Press.

- Barth, J. M., & Bastiani, A. (1997). A longitudinal study of emotional recognition and preschool children's social behavior. *Merrill-Palmer Quarterly*, *43*, 107-128.
- Berndt, T. (1987). The distinctive features of conversations between friends: Theories, research, and implications for sociomoral development. In W. M. Kurtines, J. Gewirtz, et al. (Eds.), *Moral development through social interaction*. New York, NY: Wiley.
- Birch, S. H., Ladd, G. W., & Blecher-Sass, H. (1997). The teacher-child relationship and children's early school adjustment: Good-byes can build trust. *Journal of School Psychology*, *35*, 61-79.
- Blair, C. (2002). School Readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist*, *57*, 111-127.
- Bretherton, I, Fritz, J, Zahn-Waxler, C, et al. (1986). Learning to talk about emotions: A functionalist perspective. *Child Development*, *56*, 529-548.
- Brown, J. R., Donelan-McCall, N., & Dunn, J. (1996). Why talk about mental states? The significance of children's conversations with friends, siblings, and mothers. *Child Development*, *67*, 836-849.
- Brown, J. R., & Dunn, J. (1991). "You can cry, mum": The social and developmental implications of talk about internal states. *British Journal of Developmental Psychology*, *9*, 237-256.
- Brown, J. R., & Dunn, J. (1992). Talk with your mother or your sibling? Developmental changes in early family conversations about feelings. *Child Development*, *63*, 336-349.
- Brown, J.R., & Dunn, J. (1996). Continuities in emotion understanding from three to six years. *Child Development*, *67*, 789-802.
- Campbell, S.B., & Ewing, L.J. (1990). Follow-up of hard-to-manage preschoolers: adjustment at age 9 and predictors of continuing symptoms. *Journal of Child Psychology, Psychiatry and Allied Disciplines*, *31*, 871-889.
- Campos, J. J., & Barrett, K. C. (1984). Toward a new understanding of emotions and their development. In C. E. Izard, J. Kagan & R. B. Zajonc (Eds.), *Emotions, cognition, & behavior* (pp. 229-263). New York, NY: Cambridge University Press.
- Campos, J. J., Mumme, D. L., Kermoian, R., & Campos, R. G. (1994). A functionalist perspective on the nature of emotion. *Monographs of the Society for Research in Child Development*, *59*(2-3), 284-303.
- Carlton, M. P. (2000). Motivation and school readiness in kindergarten children. *Dissertation Abstracts International Section A Human and Social Sciences*, *60*(11-A), 3899.
- Carlton, M. P., & Winsler, A. (1999). School readiness: The need for a paradigm shift. *School Psychology Review*, *28*, 338-352.
- Carson, J. L., & Parke, R. D. (1996). Reciprocal negative affect in parent-child interactions and children's peer competency. *Child Development*, *67*, 2217-2226.
- Casey, R. J. (1993). Children's emotional experience: Relations among expression, self-report, and understanding. *Developmental Psychology*, *29*, 119-129.
- Cassidy, J., Parke, R., Butovsky, L., & Braungart, J. (1992). Family-peer connections: The roles of emotional expressiveness within the family and children's understanding of emotions. *Child Development*, *63*, 603-618.
- Cole, P. M. (1986). Children's spontaneous control of facial expression. *Child Development*, *57*, 1309-1321.

- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: methodological challenges and directions for child development research. *Child Development, 75*, 317-333.
- Cole, P. M., Teti, L. O., & Zahn-Waxler, C. (2003). Mutual emotion regulation and the stability of conduct problems between preschool and early school age. *Development and Psychopathology, 15*(1), 1-18.
- Contreras, J. M., Kerns, K., Weimer, B. L., Gentzler, A. L., & Tomich, P. L. (2000). Emotion regulation as a mediator of associations between mother-child attachment and peer relationships in middle childhood. *Journal of Family Psychology, 14*, 111-124.
- Cook, E. T., Greenberg, M. T., & Kusche, C. A. (1994). The relations between emotional understanding, intellectual functioning, and disruptive behavior problems in elementary-school-aged children. *Journal of Abnormal Child Psychology, 22*(2), 205-219.
- Corsaro, W., & Eder, D. (1990). Children's peer culture. *Annual Review of Sociology, 16*, 197-220.
- Covell, K., & Miles, B. (1992). Children's beliefs about strategies to reduce parental anger. *Child Development, 63*, 381-390.
- Crick, N., & Dodge, K. (1994). A review and reformulation of social-information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*, 74-101.
- Cutting, A. L., & Dunn, J. (1999). Theory of mind, emotion understanding, language, and family background: Individual differences and interrelations. *Child Development, 70*, 853-865.
- Cutting, A. L., & Dunn, J. (2002). The cost of understanding other people: Social cognition predicts young children's sensitivity to criticism. *Journal of Child Psychiatry and Psychology and Allied Disciplines, 41*, 849-860.
- Dadds, M. R., Sanders, M. R., Morrison, M., & Rebetz, M. (1992). Childhood depression and conduct disorder: II. An analysis of family interaction patterns in the home. *Journal of Abnormal Psychology, 101*, 505-513.
- DeMulder, K.E., Denham, S. A., Schmidt, M., & Mitchell, J. (2000). Q-sort assessment of attachment security during the preschool years: Links from home to school. *Developmental Psychology, 36*, 274-282.
- Denham, S. A. (1986). Social cognition, social behavior, and emotion in preschoolers: Contextual validation. *Child Development, 57*, 194-201.
- Denham, S. A. (1989). Maternal affect and toddlers' social-emotional competence. *American Journal of Orthopsychiatry, 59*, 368-376.
- Denham, S. A. (1993). Maternal emotional responsiveness and toddlers' social-emotional functioning. *Journal of Child Psychology and Psychiatry, 34*, 715-728.
- Denham, S. A. (1997). "When I have a bad dream, Mommy holds me": Preschoolers' consequential thinking about emotions and social competence. *International Journal of Behavioral Development, 20*, 301-319.
- Denham, S. A. (1998). *Emotional development in young children*. New York, NY: Guilford.
- Denham, S. A., & Auerbach, S. (1995). Mother-child dialogue about emotions. *Genetic, Social, and General Psychology Monographs, 121*, 311-338.
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K. S., Auerbach-Major, S. T., et al. (2003). Preschoolers' emotional competence: Pathway to mental health? *Child Development, 74*, 238-256.

- Denham, S. A., Blair, K. A., Schmidt, M. S., & DeMulder, E. (2002). Compromised emotional competence: Seeds of violence sown early? *American Journal of Orthopsychiatry*, *72*, 70-82.
- Denham, S. A., & Burton, R. (1996). A social-emotional intervention for at-risk 4-year-olds. *Journal of School Psychology*, *34*, 225-245.
- Denham, S. A., & Burton, R. (2003). *Social and emotional prevention and intervention programming for preschoolers*. New York, NY: Kluwer-Plenum.
- Denham, S. A., Caverly, S., Schmidt, M., Blair, K., DeMulder, E., Caal, S., et al. (2002). Preschool understanding of emotions: Contributions to classroom anger and aggression. *Journal of Child Psychology and Psychiatry*, *43*, 901-916.
- Denham, S. A., Cook, M. C., & Zoller, D. (1992). Baby looks very sad: Discussions about emotions between mother and preschooler. *British Journal of Developmental Psychology*, *10*, 301-315.
- Denham, S. A., & Couchoud, E. A. (1990a). Young preschoolers' ability to identify emotions in equivocal situations. *Child Study Journal*, *20*, 193-202.
- Denham, S. A., & Couchoud, E. A. (1990b). Young preschoolers' understanding of emotion. *Child Study Journal*, *20*, 171-192.
- Denham, S. A., & Couchoud, E. A. (1991). Social-emotional predictors of preschoolers' responses to an adult's negative emotions. *Journal of Child Psychology and Psychiatry*, *32*, 595-608.
- Denham, S. A., Grant, S., & Hamada, H. A. (2002, June). "I have two 1st teachers": Mother and teacher socialization of preschoolers' emotional and social competence. Paper presented in symposium at the 7th Head Start Research Conference, Washington, DC.
- Denham, S. A., & Grout, L. (1992). Mothers' emotional expressiveness and coping: Topography and relations with preschoolers' social-emotional competence. *Genetic, Social, and General Psychology Monographs*, *118*, 75-101.
- Denham, S. A., & Grout, L. (1993). Socialization of emotion: Pathway to preschoolers' affect regulation. *Journal of Nonverbal Behavior*, *17*, 215-227.
- Denham, S. A., & Holt, R. W. (1993). Preschoolers' likability as cause or consequence of their social behavior. *Developmental Psychology*, *29*, 271-275.
- Denham, S. A., & Kochanoff, A. T. (2003). Parental contributions to preschoolers' understanding of emotion. *Marriage & Family Review*, *34*(3/4), 311-345.
- Denham, S. A., Mason, T., Caverly, S., Schmidt, M., Hackney, R., Caswell, C., et al. (2001). Preschoolers at play: Co-Socializers of emotional and social competence. *International Journal of Behavioral Development*, *25*, 290-301.
- Denham, S. A., McKinley, M., Couchoud, E. A., & Holt, R. (1990). Emotional and behavioral predictors of peer status in young preschoolers. *Child Development*, *61*, 1145-1152.
- Denham, S. A., Mitchell-Copeland, J., Strandberg, K., Auerbach, S., & Blair, K. (1997). Parental contributions to preschoolers' emotional competence: Direct and indirect effects. *Motivation and Emotion*, *27*, 65-86.
- Denham, S. A., Renwick, S., & Holt, R. (1991). Working and playing together: Prediction of preschool social-emotional competence from mother-child interaction. *Child Development*, *62*, 242-249.
- Denham, S. A., Renwick-DeBardi, S., & Hewes, S. (1994). Affective communication between mothers and preschoolers: Relations with social-emotional competence. *Merrill-Palmer Quarterly*, *40*, 488-508.

- Denham, S. A., Workman, E., Cole, P. M., Weissbrod, C., Kendziora, K. T., & Zahn-Waxler, C. (2000). Prediction of externalizing behavior problems from early to middle childhood: The role of parental socialization and emotion expression. *Development and Psychopathology, 12*, 23-45
- Denham, S. A., Zahn-Waxler, C., Cummings, E. M., & Iannotti, R. J. (1991). Social-competence in young children's peer relationships: Patterns of development and change. *Child Psychiatry and Human Development, 22*, 29-43.
- Denham, S. A., & Zoller, D. (1991). "When my hamster died, I cried": Preschoolers' attributions of the causes of emotions. *Journal of Genetic Psychology, 152*, 371-373.
- Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialization of preschoolers' understanding of emotion. *Developmental Psychology, 30*, 928-936.
- Denton, K., & Zarbatany, L. (1996). Age differences in support processes in conversations between friends. *Child Development, 67*, 1360-1373.
- Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin, 110*, 3-25.
- Dodge, K. A., Laird, R., Lochman, J. E., Zelli, A., & Conduct Problems Prevention Research Group. (2002). Multidimensional latent-construct analysis of children's social information processing patterns: Correlations with aggressive behavior problems. *Psychological Assessment, 14*, 60-73.
- Dodge, K. A., & Somberg, D. R. (1987). Hostile attribution biases among aggressive boys are exacerbated among conditions of threat to the self. *Child Development, 58*, 213-224.
- Domitrovich, C. E., Cortes, R., & Greenberg, M. (2007). Improving young children's social and emotional competence: a randomized trial of the preschool "PATHS" curriculum. *The Journal of Primary Prevention*
- Dunn, J. (1994). Understanding others and the social world: Current issues in developmental research and their relation to preschool experiences and practice. *Journal of Applied Developmental Psychology, 15*, 571-583.
- Dunn, J., Brown, J. R., & Beardsall, L. A. (1991). Family talk about emotions, and children's later understanding of others' emotions. *Developmental Psychology, 27*, 448-455.
- Dunn, J., Brown, J. R., & Maguire, M. (1995). The development of children's moral sensibility: Individual differences and emotion understanding. *Developmental Psychology, 31*, 649-659.
- Dunn, J., Brown, J. R., Slomkowski, C., Tesla, C., & Youngblade, L. (1991). Young children's understanding of other people's feelings and beliefs: Individual differences and their antecedents. *Child Development, 62*, 1352-1366.
- Dunn, J., & Cutting, A. L. (1999). Understanding others, and individual differences in friendship interactions in young children. *Social Development, 8*, 201-219.
- Dunn, J., Cutting, A. L., & Fisher, N. (2002). Old friends, new friends: Predictors of children's perspective on their friends at school. *Child Development, 73*(2), 621-635.
- Dunn, J., & Herrera, C. (1997). Conflict resolution with friends, siblings, and mothers: A developmental perspective. *Aggressive Behavior, 23*, 343-357.
- Dunn, J., & Hughes, C. (1998). Young children's understanding of emotions within close relationships. *Cognition & Emotion, 12*, 171-190.
- Dunn, J., Slomkowski, C., Donelan, N., & Herrera, C. (1995). Conflict, understanding, and relationships: Developments and differences in the preschool years. *Early Education and Development, 6*, 303-316.

- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry, 9*, 241-273.
- Eisenberg, N., & Fabes, R. A. (1994). Mothers' reactions to children's negative emotions: Relations to children's temperament and anger behavior. *Merrill-Palmer Quarterly, 40*, 138-156.
- Eisenberg, N., Fabes, R. A., Bernzweig, J., Karbon, M., Poulin, R., & Hanish, L. (1993). The relations of emotionality and regulation to preschoolers' social skills and sociometric status. *Child Development, 64*, 1418-1438.
- Eisenberg, N., Fabes, R. A., Guthrie, I. K., Murphy, B. C., Maszk, P., Holmgren, R., et al. (1996). The relations of regulation and emotionality to problem behavior in elementary school children. *Development & Psychopathology, 8*, 141-162.
- Eisenberg, N., Fabes, R. A., Murphy, B., Maszk, P., Smith, M., & Karbon, M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development, 66*, 1360-1384.
- Eisenberg, N., Fabes, R. A., & Murphy, B. C. (1996). Parents' reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Development, 67(5)*, 2227-2247.
- Eisenberg, N., Fabes, R. A., Nyman, M., Bernzweig, J., & Pinuelas, A. (1994). The relation of emotionality and regulation to preschoolers' anger-related reactions. *Child Development, 65*, 1352-1366.
- Eisenberg, N., Fabes, R. A., Shepard, S. A., Guthrie, I., Murphy, B. C., & Reiser, M. (1999). Parental reactions to children's negative emotions: Longitudinal relations to quality of children's social functioning. *Child Development, 70*, 513-534.
- Eisenberg, N., Fabes, R. A., Shepard, S. A., Murphy, B. C., Guthrie, I. K., Jones, S., et al. (1997). Contemporaneous and longitudinal prediction of children's social functioning from regulation and emotionality. *Child Development, 68*, 642-664.
- Eisenberg, N., Gershoff, E. T., Fabes, R. A., Shepard, S. A., Cumberland, A., Losoya, S., et al. (2001). Mothers' emotional expressivity and children's behavior problems and social competence: Mediation through children's regulation. *Developmental Psychology, 37*, 475-490.
- Eisenberg, N., Valiente, C., Morris, A. S., Fabes, R. A., Cumberland, A., Reiser, M., et al. (2003). Longitudinal relations among parental emotional expressivity, children's regulation, and quality of socioemotional function. *Developmental Psychology, 39(1)*, 3-19.
- Fabes, R. A., Eisenberg, N., Hanish, L. D., & Spinrad, T. L. (2001). Preschoolers' spontaneous emotion vocabulary: Relations to likeability. *Early Education and Development, 12(1)*, 11-28.
- Fabes, R. A., Leonard, S. A., Kupanoff, K., & Martin, C. L. (2001). Parental coping with children's negative emotions: Relations with children's emotional and social responding. *Child Development, 72(3)*, 907-920.
- Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2003). The Coping with Children's Negative Emotions Scale (CCNES): Psychometric properties and relations with children's emotional competence. *Marriage & Family Review, 34(3/4)*, 285-310.
- Fine, S. E., Izard, C. E., Mostow, A. J., Trentacosta, C. J., & Ackerman, B. P. (2003). First grade emotion knowledge as a predictor of fifth grade self-reported internalizing behaviors in children from economically disadvantaged families. *Development and Psychopathology, 15(2)*, 331-342.

- Frey, K. S., Hirschstein, M. K., & Guzzo, B. A. (2000). Second Step: Preventing aggression by promoting social competence. *Journal of Emotional and Behavioral Disorders, 8*, 102-112.
- Gagnon, C., Craig, W. M., Tremblay, R. E., Zhou, R. M., & Vitaro, F. A. (1995). Kindergarten predictors of boys' stable behavior problems at the end of elementary school. *Journal of Abnormal Child Psychology, 23*, 751-766.
- Garner, P. W. (2006). Prediction of prosocial and emotional competence from maternal behavior in African American preschoolers. *Cultural Diversity & Ethnic Minority Psychology, 12*(2), 179-198.
- Garner, P. W., & Estep, K. M. (2001). Emotional competence, emotion socialization, and young children's peer-related social competence. *Early Education and Development, 12*(1), 29-48.
- Garner, P. W., Jones, D. C., Gaddy, G., & Rennie, K. (1997). Low income mothers' conversations about emotions and their children's emotional competence. *Social Development, 6*, 37-52.
- Garner, P. W., Jones, D. C., & Miner, J. L. (1994). Social competence among low-income preschoolers: Emotion socialization practices and social cognitive correlates. *Child Development, 65*, 622-637.
- Garner, P. W., & Spears, F. M. (2000). Emotion regulation in low-income preschoolers. *Social Development, 9*, 246-264.
- Gilliom, M., Shaw, D. S., Beck, J. E., Schonberg, M. A., & Lukon, J. L. (2002). Anger regulation in disadvantaged preschool boys: Strategies, antecedents, and the development of self-control. *Developmental Psychology, 38*(2), 222-235.
- Gnepp, J. (1989). Personalized inferences of emotions and appraisals: Component processes and correlates. *Developmental Psychology, 25*, 277-288.
- Gnepp, J., & Chilamkurti, C. (1988). Children's use of personality attributions to predict other people's emotional and behavioral reactions. *Child Development, 59*, 743-754.
- Gnepp, J., & Hess, D. L. R. (1986). Children's understanding of verbal and facial display rules. *Developmental Psychology, 22*, 103-108.
- Gordis, F., Rosen, A. B., & Grand, S. (1989, April). *Young children's understanding of simultaneous conflicting emotions*. Paper presented at the Biennial Meetings of the Society for Research in Child Development, Kansas City, MO
- Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion: How families communicate emotionally*. Mahwah, NJ: Erlbaum.
- Gottman, J. M., & Mettetal, G. (1986). Speculations about social and affective development of friendship and acquaintanceship through adolescence. In J. M. Gottman & J. Parker (Eds.), *Conversations of friends Speculations on affective development* (pp. 192-237). New York, NY: Cambridge University Press.
- Greenberg, M. T., & Snell, J. L. (1997). Brain development and emotional development: The role of teaching in organizing the frontal lobe. In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence* (pp. 93-119). New York: Basic Books.
- Griffin, S. (1995). A cognitive-developmental analysis of pride, shame, and embarrassment in middle childhood. In J. Tangney & K. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 219-237). New York, NY: Guilford Press.
- Grolnick, W. S., Bridges, L. J., & Connell, J. P. (1996). Emotion regulation in two-year-olds: Strategies and emotional expression in four contexts. *Child Development, 67*, 928-941.



- Grolnick, W. S., Kurowski, C. O., McMenemy, J. M., Rivkin, I., & Bridges, L. J. (1998). Mothers' strategies for regulating their toddlers' distress. *Infant Behavior & Development, 21*(3), 437-450.
- Grotzger, J.K., & Crick, N. (1996). Relational aggression, overt aggression, and friendship. *Child Development, 67*, 2328-2338.
- Haapasalo, J., & Tremblay, R. E. (1994). Physically aggressive boys from ages 6 to 12: Family background, parenting behavior, and prediction of delinquency. *Journal of Consulting and Clinical Psychology, 62*, 1044-1052.
- Halberstadt, A. G. (1991). Socialization of expressiveness: Family influences in particular and a model in general. In R. S. Feldman & S. Rimé (Eds.), *Fundamentals of emotional expressiveness* (pp. 106-162.). Cambridge, UK: Cambridge University Press.
- Halberstadt, A. G., Denham, S. A., & Dunsmore, J. (2001). Affective social competence. *Social Development, 10*, 79-119.
- Harms, T., & Clifford, R. M. (1980). *Early Childhood Environmental Rating Scale*. New York, NY: Teachers College Press.
- Harris, P. (1989). *Children and emotions*. Oxford: Blackwell.
- Harter, S., & Buddin, B. J. (1987). Children's understanding of the simultaneity of two emotions: A five-stage developmental acquisition sequence. *Developmental Psychology, 23*, 388-399.
- Hartup, W. W. (1999). Constraints on peer socialization: Let me count the ways. *Merrill-Palmer Quarterly, 45*, 172-183.
- Hochschild, A.R. (1983). *The managed heart. Commercialization of human feelings*. Berkeley, CA: University of California Press.
- Hoffner, C., & Badzinski, D. M. (1989). Children's integration of facial and situations cues to emotion. *Child Development, 60*, 415-422.
- Howes, C. (2000). Social-emotional classroom climate in child care child-teacher relationships and children's second grade peer relations. *Social Development, 9*, 191-204.
- Howes, C., & Smith, E. W. (1995). Relations among child care quality, teacher behavior, children's play activities, emotional security, and cognitive activity in child care. *Early Childhood Research Quarterly, 10*, 381-404.
- Howse, R. B., Calkins, S. D., Anastopoulos, A. D., Keane, S. P., & Shelton, T. L. (2003). Regulatory contributors to children's kindergarten achievement. *Early Education and Development, 14*(n1), p101.
- Hubbard, J. A., & Coie, J. D. (1994). Emotional correlates of social competence in children's peer relationships. *Merrill-Palmer Quarterly, 40*, 1-20.
- Huffman, L. C, Mehlinger, S. L, Kerivan, & A. S. (2000). *Risk factors for academic and behavioral problems at the beginning of school*. In Off to a good start: Research on the risk factors for early school problems and selected federal policies affecting children's social and emotional development and their readiness for school. Chapel Hill NC: University of North Carolina FPG Child Development Center.
- Hughes, C., Dunn, J., & White, A. (1998). Trick or treat? Uneven understanding of mind and emotion and executive dysfunction in "hard-to-manage" preschoolers. *Journal of Child Psychology & Psychiatry & Allied Disciplines, 39*, 981-994.
- Hyson, M. C. (1994). *The emotional development of young children: Building an emotion-centered curriculum*. New York, NY: Teachers College Press.

- Isley, S. L., O'Neil, R., Clatfelter, D., & Parke, R. D. (1999). Parent and child expressed affect and children's social competence: Modeling direct and indirect pathways. *Developmental Psychology, 35*, 547-560.
- Izard, C. E. (2002a). Emotion knowledge and emotion utilization facilitate school readiness. *SRCD Social Policy Report, XVI*(3), 8.
- Izard, C. E. (2002b). Translating emotion theory and research into preventive interventions. *Psychological Bulletin, 128*, 796-824.
- Izard, C. E., & Bear, G. (2001). *Head Start/ECAP emotions curriculum*. Newark, DE: University of Delaware Instructional Resources Center.
- Izard, C. E., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001). Emotions knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science, 12*, 18-23.
- Jones, S. M., & Eisenberg, N. (1997, April). *Parent socialization and children's social competence: The mediating role of children's affective displays*. Presented at the biennial meeting of the Society for Research in Child Development, Washington, DC.
- Joseph, G. E., & Strain, P. S. (2003). Comprehensive evidence-based social-emotional curricula for young children: An analysis of efficacious adoption potential. *Topics in Early Childhood Special Education, 23*(2), 65-76.
- Josephs, I. (1994). Display rule behavior and understanding in preschool children. *Journal of Nonverbal Behavior, 18*, 301-326.
- Keogh, B. K. (1992). Temperament and teachers' views of teachability. In W. Carey & S. McDevitt (Eds.), *Prevention and early intervention: Individual differences as risk factors for the mental health of children* (pp. 246-254). New York: Bruner/Mazel.
- Kerns, K., Klepac, L., & Cole, A. K. (1996). Peer relationships and preadolescents' perceptions of security in the child-mother relationship. *Developmental Psychology, 32*, 457-466.
- Kestenbaum, R., & Gelman, S. (1995). Preschool children's identification and understanding of mixed emotions. *Cognitive Development, 10*, 443-458.
- Kieras, J. C., Tobin, R. M., & Graziano, W. G. (2003, April). *Effortful control & emotional responses to undesirable gifts*. Paper presented at the Society for Research in Child Development, Tampa, FL.
- Knitzer, J. (1993). Children's mental health policy: Challenging the future. *Journal of Emotional and Behavioral Disorders, 1*, 8-16.
- Kochenderfer, B. J., & Ladd, G. W. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child Development, 67*, 1305-1317.
- Kopp, C. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental Psychology, 25*, 343-354.
- Krappmann, L. (1996). The development of diverse relationships in the social world of childhood. In A. E. Auhagen & M. von Salisch (Eds.), *The diversity of human relationships* (pp. 52-78). New York, NY: Cambridge University Press.
- Ladd, G. (1999). Peer relationships and social competence during early and middle childhood. *Annual review of psychology, 50*, 333-359
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development, 70*, 1373-1400.
- Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development, 67*, 1103-1118.

- Laible, D., & Thompson, R.A. (1998). Attachment and emotional understanding in preschool children. *Developmental Psychology, 34*, 1038-1045.
- Lemerise, E., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development, 71*, 107-118.
- Lemerise, E. A., & Dodge, K. A. (2000). The development of anger and hostile interactions. In M. L. J. M. Haviland-Jones (Ed.), *Handbook of emotions* (2 ed., pp. 594-606). New York.: Guilford Press.
- Lewis, M., Stanger, C., & Sullivan, M. E. (1989). Deception in three-year-olds. *Developmental Psychology, 25*, 439-443.
- Lewis, M., Sullivan, M. E., & Vasen, A. (1987). Making faces: Age and emotion differences in the posing of emotional expression. *Developmental Psychology, 23*, 690-697.
- Liew, J., Eisenberg, N., Losoya, S. H., Fabes, R. A., Guthrie, I. K., & Murphy, B. C. (2003). Children's physiological indices of empathy and their socioemotional adjustment: Does Caregivers' Expressivity Matter? *Journal of Family Psychology, 17*(4), 584-597.
- Martin, R. P., Drew, D., Gaddis, L. R., & Moseley, M. (1988). Prediction of elementary school achievement from preschool temperament: Three studies. *School Psychology Review, 17*, 125-137.
- Meerum Terwogt, M., & Olthof, T. (1989). Awareness and self-regulation of emotion in young children. In C. Saarni & P. Harris (Eds.), *Children's understanding of emotion* (pp. 209-237). New York, NY: CUP.
- Miller, A. L., Fine, S. E., Gouley, K. K., Seifer, R., Dickstein, S., & Shields, A. (2006). Showing and telling about emotions: Interrelations between facets of emotional competence and associations with classroom adjustment in Head Start preschoolers. *Cognition & Emotion, 20*(8), 1170-1192.
- Miller, A. L., Gouley, K. K., Seifer, R., Zakriski, A., Eguia, M., & Vergnani, M. (2005). Emotion knowledge skills in low-income elementary school children: Associations with social status and peer experiences. *Social Development, 14*(4), 637-651.
- Miller, A. L., & Olson, S. L. (2000). Emotional expressiveness during peer conflicts: A predictor of social maladjustment among high-risk preschoolers. *Journal of Abnormal Child Psychology, 28*(4), 339-352.
- Morrison, E. F., Rimm-Kauffman, S., & Pianta, R. C. (2003). A longitudinal study of mother-child interaction at school entry and social and academic outcomes in middle school. *Journal of School Psychology, 41*, 185-200.
- Mostow, A. J., Izard, C. E., Fine, S., & Trentacosta, R. (2002). Modeling emotional, cognitive, and behavioral predictors of peer acceptance. *Child Development, 73*, 1775-1787.
- Murphy, B., & Eisenberg, N. (1996). Provoked by a peer: Children's anger related responses and their relation to social functioning. *Merrill-Palmer-Quarterly, 42*, 103-124.
- Murphy, B. C., Shepard, S., Eisenberg, N., Fabes, R. A., & Guthrie, I. K. (1999). Contemporaneous and longitudinal relations of dispositional sympathy to emotionality, regulation, and social functioning. *Journal of Early Adolescence, 19*, 66-97.
- Nelson, C. A. (1994). Neural bases of infant temperament. In J. Bates & T. E. Wachs (Eds.), *Temperament: Individual differences at the interface of biology and behavior* (pp. 47-82). Washington, DC: American Psychological Association.

- Nunner-Winkler, G., & Sodian, B. (1988). Children's understanding of moral emotions. *Child Development, 59*, 1323-1338.
- Olthof, T., Ferguson, T. J., & Luiten, A. (1989). Personal responsibility antecedents of anger and blame reactions in children. *Child Development, 60*, 1328-1336.
- Olthof, T., Meerum Terwogt, M., Van Eck, O. V., & Koops, W. (1987). Children's knowledge of the integration of successive emotions. *Perceptual & Motor Skills, 65*, 407-414.
- O'Neil, R., Welsh, M., Parke, R. D., Wang, S., & Strand, C. (1997). A longitudinal assessment of the academic correlates of early peer acceptance and rejection. *Journal of Clinical Child Psychology, 26*, 290-303.
- Ontai, L. L., & Thompson, R. A. (2002). Patterns of attachment and maternal discourse effects on children's emotion understanding from 3 to 5 years of age. *Social Development, 11*(4), p. 433.
- Palinsin, H. A. (1986). Preschool temperament and performance on achievement tests. *Developmental Psychology, 2*, 766-770.
- Park, K. A., Lay, K., & Ramsay, L. (1993). Individual differences and developmental changes in preschoolers' friendships. *Developmental Psychology, 29*, 264-270.
- Parke, R. D. (1994). Progress, paradigms, and unresolved problems: A commentary on recent advances in our understanding of children's emotions. *Merrill-Palmer Quarterly, 40*, 157-169.
- Parke, R. D., Cassidy, J., Burks, V. M., Carson, J. L., & Boyum, L. (1992). Familial contribution to peer competence among young children: The role of interactive and affective processes. In R. D. P. G. W. Ladd (Ed.), *Family-peer relationships Modes of linkage* (pp. 107-134). Hillsdale, NJ: Erlbaum.
- Parker, J. G., & Gottman, J. M. (1989). Social and emotional development in a relational context: Friendship interaction from early childhood to adolescence. In T. J. Berndt & G. W. Ladd (Eds.), *Peer relationships in child development* (pp. 95-131). New York: John Wiley.
- Peng, M., Johnson, C. N., Pollock, J., Glasspool, R., & Harris, P. L. (1992). Training young children to acknowledge mixed emotions. *Cognition and Emotion, 6*, 387-401.
- Pianta, R. C. (1997). Adult-child relationship processes and early schooling. *Early Education and Development, 8*, 11-26.
- Pianta, R. C., Steinberg, M., & Rollins, K. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development & Psychopathology, 7*, 295-312.
- Pons, F., & Harris, P. L. (2005). Longitudinal change and longitudinal stability of individual differences in children's emotion understanding. *Cognition & Emotion, 19*(8), 1158-1174.
- Raikes, H. A., & Thompson, R. A. (2006). Family emotional climate, attachment security and young children's emotion knowledge in a high risk sample. *British Journal of Developmental Psychology, 24*(1), 89-104.
- Raver, C. C., Blackburn, E. K., & Bancroft, M. (1999). Relations between effective emotional self-regulation, attentional control, and low-income preschoolers' social competence with peers. *Early Education and Development, 10*, 333-350.
- Raver, C. C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-olds*. New York, NY: National Center for Children in Poverty.

- Reimer, K. J. (1996). Emotion socialization and children's emotional expressiveness in the preschool context (emotional expression). *Dissertation Abstracts International*, 57(07A), 0010.
- Rimé, B., Dozier, S., Vandenplas, C. & Declercq, M. (1996). Social sharing of emotion in children. In N. Frijda (Ed.), *Proceedings of the 9th Conference of the International Society for Research on Emotions, Toronto, Canada* (pp. 161-163). Storrs, Ct.: ISRE Publications.
- Roberts, W. R., & Strayer, J. A. (1996). Empathy, emotional expressiveness, and prosocial behavior. *Child Development*, 67, 449-470.
- Robins, L. N., & Rutter, M. (1990). *Straight and devious pathways from childhood to adulthood*. Cambridge: Cambridge University Press.
- Rose, A., & Asher, S. (1999a). Children's goals and strategies in response to conflicts within a friendship. *Developmental Psychology*, 35, 69-79.
- Rose, A., & Asher, S. (1999b). *Seeking and giving social support within a friendship*. Paper presented at the Society for Research in Child Development, Albuquerque, N.M.
- Rubin, K. H., Burgess, K. B., Dwyer, K. M., & Hastings, P. (2003). Predicting preschoolers' externalizing behaviors from toddler temperament, conflict, and maternal negativity. *Developmental Psychology*, 39(1), 164-176.
- Rubin, K. H., & Clark, M. L. (1983). Preschool teachers' ratings of behavioral problems: Observational, sociometric, and social-cognitive correlates. *Journal of Abnormal Child Psychology*, 11, 273-286.
- Rubin, K. H., & Daniels-Beirness, T. (1983). Concurrent and predictive correlates of sociometric status in kindergarten and grade 1 children. *Merrill-Palmer Quarterly*, 29, 337-352.
- Rydell, A.-M., Berlin, L., & Bohlin, G. (2003). Emotionality, emotion regulation, and adaptation among 5- to 8-year-old children. *Emotion*, 3(1), 30-47.
- Saarni, C. (1988). Children's understanding of the interpersonal consequences of dissemblance of nonverbal emotional-expressive behavior. *Journal of Nonverbal Behavior*, 12, 275-294.
- Saarni, C. (1989). Children's understanding of the strategic control of emotional expression in social transactions. In C. Saarni & P. Harris (Eds.), *Children's understanding of emotions* (pp. 181-208). Cambridge: Cambridge University Press.
- Saarni, C. (1992). Children's emotional-expressive behaviors as regulators of others' happy and sad emotional states. *New Directions for Child Development*, 55, 91-106.
- Saarni, C. (1997). Coping with aversive feelings. *Motivation and Emotion*, 21, 45-63.
- Saarni, C. (1999). *Children's emotional competence*. New York, NY: Guilford Press.
- Salisch, M. von (1997). *Zur entwicklung der ärgerregulierung in der mittleren kindheit* (DFG Endbericht).
- Salisch, M. von (1999b). Kooperation und konkurrenz unter gleichrangigen partnern. In L. Krappmann, H.-P. Kuhn & H. Uhlendorff (Hrsg), *Sozialisation zur mitbürgerlichkeit*. Opladen: Leske & Budrich.
- Salisch, M. von (2000a). *Wenn kinder sich ärgern... emotionsregulierung in der entwicklung*. Göttingen: Hogrefe Verlag.
- Salisch, M. von (2000c). Zum einfluß von gleichaltrigen (peers) und freunden auf die persönlichkeitsentwicklung. In M. Amelang (Hrsg), *Enzyklopädie der Psychologie, Differentielle Psychologie, Band 4: Determinanten individueller Differenzen* (pp. 345-405). Göttingen: Hogrefe.

- Schultz, D., Izard, C. E., & Ackerman, B. P. (2000). Children's anger attribution bias: Relations to family environment and social adjustment. *Social Development, 9*, 284-301.
- Schultz, D., Izard, C. E., Ackerman, B. P., & Youngstrom, E. A. (2001). Emotion knowledge in economically disadvantaged children: Self-regulatory antecedents and relations to social difficulties and withdrawal. *Development & Psychopathology, 13*, 53-67.
- Selman, R.L. (1980). *The growth of interpersonal understanding*. New York, NY: Academic Press.
- Shantz, C.U. (1983). Social cognition. In P. Mussen (Ed.), *Handbook of child psychology*, Vol. 3, 4th ed. (pp. 175-211). New York, NY: Wiley.
- Shields, A., Dickstein, S., Seifer, R., Giusti, L., Magee, K. D., & Spritz, B. (2001). Emotional competence and early school adjustment: A study of preschoolers at risk. *Early Education and Development, 12*(1), 73-97.
- Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- Slomkowski, C., & Dunn, J. (1996). Young children's understanding of other people's beliefs and feelings and their connected communication with friends. *Developmental Psychology, 32*, 442-447.
- Smith, M. (2001). Social and emotional competencies: Contributions to young African-American children's peer acceptance. *Early Education and Development, 12*(1), 49-72.
- Smollar, J., & Youniss, J. (1982). Social development through friendship. In K. H. Rubin & H. S. Ross (eds.), *Peer relationships and social skills in childhood*. New York, NY: Springer-Verlag.
- Sorber, A. V. (2001). The role of peer socialization in the development of emotion display rules: Effects of age, gender, and emotion. *Dissertation Abstracts International, 62*(02B), 1119.
- Spence, S. H. (1987). The relation between social cognitive skills and peer sociometric status. *British Journal of Developmental Psychology, 5*, 347-356.
- Sroufe, L. A., Schork, E., Motti, F., Lawroski, N., & LaFreniere, P. (1984). The role of affect in social competence. In C. E. Izard, J. Kagan & R. B. Zajonc (Eds.), *Emotions, cognition, & behavior* (pp. 289-319). Cambridge, UK: Cambridge University Press.
- Stansbury, K., & Sigman, M. (2000). Responses of preschoolers in two frustrating episodes: Emergence of complex strategies for emotion regulation. *Journal of Genetic Psychology, 161*(2), 182-202.
- Steele, H., Steele, M., Croft, C. & Fonagy, P. (1999). Infant-mother attachment at one year predicts children's understanding of mixed emotions at six years. *Social Development, 7*, 161-178.
- Stegge, H., & Meerum Terwogt, M. (1998). Perspectives on the strategic control of emotions: A developmental account. In A. Fischer & N. Frijda (Eds), *Proceedings of the 10th Meeting of the International Society for Research on Emotions*, Würzburg, 1998 (pp. 45-47). Amsterdam: ISRE Publications.
- Strandberg-Sawyer, K., Denham, S. A., DeMulder, E., Blair, K., Auerbach-Major, S., & Levitas, J. (2003). The contribution of older siblings' reactions to emotions to preschoolers' emotional and social competence. *Marriage & Family Review, 34*(3/4), 183-212.

- Strayer, J. (1980). A naturalistic study of empathic behaviors and their relation to affective states and perspective-taking skills in preschool children. *Child Development, 51*, 815-822.
- Suess, G.J., Grossmann, K.E. & Sroufe, L.A. (1992). Effects of infant attachment to mother on quality of adaptation in preschool. From dyadic to individual organization of self. *International Journal of Behavioral Development, 15*, 43-65.
- Sullivan, H.S. (1953). *The interpersonal theory of psychiatry*. New York, NY: Norton.
- Tassi, F., & Schneider, B.H. (1997). Task-oriented vs. other-referenced competition: Differential implications for children's peer relations. *Journal of Applied Social Psychology, 27*, 1557-1580.
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. In N. A. Fox (Ed.), *The development of emotion regulation: Biological and behavioral considerations. Monographs of the Society for Research in Child Development, Serial No. 240, 259 (242-243), 225-252*.
- Tomkins, S. S. (1963). *Affect, imagery, and consciousness, Vols. I and II*. New York, NY: Springer.
- Tomkins, S. (1991). *The negative affects: Anger and fear (Vol. II)*. New York, NY: Springer Publishing Co.
- Underwood, M., Coie, J.D. & Herbsman, C. (1992). Display rules for anger and aggression in school age children. *Child Development, 63*, 366-380.
- Underwood, M., Hurley, J., Johanson, C. & Mosley, C. (1999). An experimental, observational investigation of children's responses to peer provocation: Developmental and gender differences in middle childhood. *Child Development, 70*, 1428-1446.
- Volling, B. L., MacKinnon-Lewis, C., Rabiner, D. & Baradan, L. (1993). Children's social competence and sociometric status: Further exploration of aggression, social withdrawal, and peer rejection. *Development and Psychopathology, 5*, 459-483.
- Walden, T., Lemerise, E. A., & Smith, M. C. (1999). Friendship and popularity in preschool classrooms. *Early Education and Development, 10*, 351-371.
- Wartner, U., Grossmann, K. & Fremmer-Bombik, E. (1994). Attachment patterns at age six in south Germany: Predictability from infancy and implications for preschool behavior. *Child Development, 65*, 1014-1027
- Webster-Stratton, C., & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency, and violence in adolescence through interventions targeted at young children (0-8 years). *Prevention Science, 2*, 165-192.
- Werner, E. E. (1989). High-risk children in young adulthood: A longitudinal study from birth to 32 years. *American Journal of Orthopsychiatry, 59*, 72-81.
- Wintre, M., & Vallance, D. D. (1994). A developmental sequence in the comprehension of emotions: Multiple emotions, intensity and valence. *Developmental Psychology, 30*, 509-514.
- Youniss, J. (1980). *Parents and peers in social development*. Chicago, IL: University of Chicago Press.
- Zahn-Waxler, C., Iannotti, R. J., Cummings, E. M., & Denham, S. A. (1990). Antecedents of problem behaviors in children of depressed mothers. *Development and Psychopathology, 3*, 271-292.
- Zahn-Waxler, C., Radke-Yarrow, M., & King, R. A. (1979). Child rearing and children's prosocial initiations toward victims of distress. *Child Development, 50*, 319-330.
- Zeman, J., & Garber, J. (1996). Display rules for anger, sadness, and pain: It depends on who is watching. *Child Development, 67*, 957-973.

- Zeman, J., Penza, S., Shipman, K., & Young, G. (1997). Preschoolers as functionalists: The impact of social context on emotion regulation. *Child Study Journal*, 27, 41-67.
- Zeman, J., & Shipman, K. (1996). Children's expression of negative affect: Reasons and methods. *Developmental Psychology*, 32, 842-849.



Copyright of *Cognitie, Creier, Comportament/Cognition, Brain, Behavior* is the property of *Cognitie, Creier, Comportament* and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.