

## Emotion, Self-Regulation, and Social Behavior in Cultural Contexts

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The question of how a cultural perspective informs the development of children's self-regulation and social development remains somewhat neglected. In this chapter, we address this topic, emphasizing cultural influences on the socialization of emotion as they bear on the development of children's self-regulation and therefore social behavior. We share the view that individual differences in emotion regulation and social behavior are best explained by a developmental psychological perspective that integrates cultural context into its account. We also emphasize early childhood as an important period during which to study this integrative perspective. To be successful in school and in life, children must learn to engage in social behavior that conforms to social standards, which requires balancing their agentic and relationship motivations. This balance is achieved through skill at self-regulation, particularly its emotional aspects, which helps children engage in prosocial behavior even when agentic and relationship goals conflict. The behavioral standards to which children must conform are often culturally specific. We emphasize the importance of early caregiving as a means of transmitting cultural values through socialization practices, and we address caregivers' naïve theories and socialization goals that may organize their practices as they strive to foster children's social competence.

Our chapter has four sections. In the first section, we discuss the role of emotion and emotion regulation in social development. Second, we deal

with caregivers' socialization of children's emotions and social behavior, focusing on the role of self-regulation in social development. Third, we address the role of culture in the socialization of emotions, emotion regulation, and social development. In the fourth section, we summarize our major points and suggest a cultural model of emotion regulation and social development. Finally, we offer suggestions for topics for future research.

## The Role of Emotion and Emotion Regulation in Social Development

### *Functional Relations between Emotional and Social Development*

#### *Emotional Development*

Generally, it is assumed that emotions are composed of several components, including feelings, physiological activity, and cognitions. Our view of emotions is influenced heavily by contemporary theories that emphasize these components as associated aspects of emotions, but not their defining characteristics. These aspects are not always discernible and may not always correlate with one another. Rather, we assume that emotions represent motivations to achieve goals (Barrett & Campos, 1987). That is, emotions emerge as a person strives to maintain or regain a sense of well-being, that is, to achieve goals that are of significance for well-being. In this regard, emotions are not located in a person and may not involve feelings (awareness of emotion) or explicit thoughts. We further assume that biological factors undergird the ability to be emotional, and this requirement includes being able to perceive changes in well-being, to organize a goal-oriented response, and to act accordingly, including selecting actions (and inhibiting actions) that are consonant with sociocultural standards.

Regarding the development of emotions, two theoretical approaches are to be distinguished. The *structural* approach (e.g., Ekman, Friesen, & Ellsworth, 1972) is rooted in evolutionary thinking (Darwin, 1859) and assumes that a biologically based adaptive value is accorded to emotions. Further, an integrated pattern of physiological responses early in infancy is also assumed (Izard, Ackerman, Schoff, & Fine, 2000). The first basic emotions are observed at birth, and others emerge during the first year of life. These various emotional expressions appear to be biologically rooted, as they appear so early in life and are displayed in similar ways cross-culturally (Izard, 1994). Emotion theories taking a *functionalist perspective* assume that the emotional life of newborns and infants is characterized by global positive or negative experiences (Sroufe, 1996) and that emotions shape goal-directed action (Eisenberg & Spinrad, 2004). The display of emotions

has a communicative function that serves goal attainment; in infancy, for example, emotional expressions clearly influence the caretaker's behavior, and in this way the infant's emotional communication indicates the infant's goals that conditions be maintained or modified in order to regain or sustain well-being.

Because the desire to achieve one's personal goals can come into conflict with relationship goals, and each type of goal can come into conflict with sociocultural standards, successful goal achievement requires adequate *emotion regulation*. Circumstances often require the modulation of emotional experience or expression in order for a person to act in socially appropriate ways. For example, inadequately modulating the experience and expression of anger when one's goals are frustrated may lead to aggressive or rude behavior, which may have undesirable consequences such as social rejection. The regulation of anger can help a child achieve a desired goal that has been thwarted while maintaining a positive social relationship (Cole, Martin, & Dennis, 2004; Trommsdorff, 2006).

The topic of emotion regulation has gained much interest in recent years (Cole, Dennis, Martin, & Hall, 2008; Cole et al. 2004; Holodynski & Friedlmeier, 2006; Thompson, 1994). Although it is a topic of its own, from a broader perspective, *emotion regulation* can be regarded as an aspect of *self-regulation*. Self-regulation is the motivation and ability to regulate thought and action, as well as emotion, as part of goal-directed behavior (Blair, 2002; Calkins & Williford, 2009; Kopp, 1982; Trommsdorff, 2009a). That is, self-control in such forms as delay of gratification and inhibition of aggressive or antisocial behavior involves the conjoint regulation of emotion, cognition, and action. The early childhood integration of the domains that contribute to self-regulation is critical because these contribute to a child's school readiness; as early as first grade, children in formal schooling in most places in the world are expected to show persistence in learning new information, to cooperate with their classmates even when there are conflicting goals, and to comply with classroom rules (Blair, 2002). According to Eisenberg and Spinrad (2004), emotion-related self-regulation involves the processes "of initiating, avoiding, inhibiting, maintaining, or modulating the occurrence, form, intensity, or duration" of emotion-related physiological, motivational, cognitive, and/or behavioral responses in the service of affect-related biological or social adaptation in order to achieve individual goals.

A major aspect of self-regulation is effortful control, often conceptualized as a dimension of *temperament*. Effortful control from this perspective is conceptualized as the means by which children regulate their emotionality, defined as "the efficiency of executive attention—including the ability to inhibit a dominant response and/or to activate a subdominant response, to plan, and to detect errors" (Rothbart & Bates, 2006, p. 129). Effortful

control first emerges during the late toddler years as the neural underpinnings of the executive attention system mature. In addition to attentional control, effortful control includes the ability to inhibit prepotent responses and to plan actions, skills that also serve self-regulation (Posner & Rothbart, 2007; also see Garon, Bryson, & Smith, 2008). To summarize, emotion regulation is a part of *self-regulation* and entails the recruitment of effortful control, by which the component domains of action, thought, and emotion are coordinated to effect appropriate social behavior (Blair, 2002). In line with functionalist theories of emotion, we take an agentic perspective on self-regulation; that is, we view the emotional aspects of self-regulation as goal-directed and influencing action that is aimed at achieving those goals, appreciating that the goals involved in complex social behavior can be, and often are, multiple (Cole et al., 2004; Eisenberg & Spinrad, 2004; Trommsdorff, 2009a). Therefore, the importance of emotion regulation for the effective self-regulation of social behavior is evident.

### *Social Development*

Emotional competence, including emotion regulation, is regarded as an important accomplishment of a child's development because of its importance to social competence (Brownell & Kopp, 2007; Chen & French, 2008; Denham, 1998; Rubin, Bukowski, & Parker, 1998; Saarni, 1999). Denham and colleagues (Denham et al., 2003) investigated the degree to which early emotional competence paves the pathway to later social competence. Using a longitudinal design, they showed that three components of 3- and 4-year-olds' emotional competence (competent emotional expressivity, competent emotional knowledge, and competent emotion regulation) predicted subsequent social adjustment and social competencies that emerged during the preschool and kindergarten years. Generally speaking, evidence suggests the importance of early emotional development, particularly the ability to regulate and understand emotional responses, in promoting children's prosocial behavior and reducing the likelihood of aggressive behavior.

Evolutionary theorizing assumes biological roots of *aggression* and of emotions such as anger that motivate aggression. However, much recent work on aggression was influenced by social-cognitive theories, such as Bandura's (1989) social learning theory and Dodge and Pettit's (2003) social information-processing model. These approaches, however, tended to neglect the role of emotion and emotion regulation (Lemerise & Arsenio, 2000). In contrast, motivational theories on aggression assume that biological factors (genetic dispositions), emotions (e.g., anger), and cognitive processes (e.g., attributions about the other person's intentions) influence aggressive behavior and its development while empathy and sympathy

inhibit aggressive responses (Kornadt, 2002, 2007). Accordingly, the regulation of emotions in the anger family and the activation of other-oriented emotions, such as empathy, should reduce aggressive behavior and foster social competence.

*Prosocial* behavior has often been regarded as a desirable aspect of social development and an important domain of social competence. Again, the role of emotions is of crucial importance for the study of prosocial behavior. Studies based on evolutionary assumptions have pointed out the survival value of prosocial behavior, especially in terms of reciprocity and cooperation (Tomasello, Carpenter, Call, Behne, & Moll, 2005). These authors have underlined the importance of emotions for prosocial behaviors such as cooperation. According to Tomasello et al. (2005), emotions such as anxiety, joy, and anger have similar features in humans and primates, but the joy that arises from sharing with others is uniquely human. A basic prerequisite of prosocial behavior may be the ability to understand what another person is thinking, feeling, and doing, an ability mediated in part by mirror neuron mechanisms (Gallese, Fadiga, Fogassi, & Rizzolatti, 1996; Rizzolatti & Fabbri-Destro, 2008). These enable humans to understand others' emotions without complex cognitive elaboration. According to this biologically rooted theory, empathy—which is often assumed to motivate prosocial behavior—is a universal capacity.

As with theories about the development of aggression, theories of prosocial behavior traditionally emphasized the cognitive aspects of prosociality. The functional value of emotions emerged from observational studies of infant and early childhood development. For example, an infant's crying can evoke distress in young children who observe the crying (Zahn-Waxler & Robinson, 1995). The young child's emotional reaction to another's distress is regarded as promoting the development of prosocial behavior. In some studies, the empathic responses and prosocial behavior of 2-year-olds is conceived of and measured as the same phenomenon (Bischof-Köhler, 2000).

However, evidence has shown that the quality of emotional reactions when witnessing another person in need or distress differs among individuals. Underwood and Moore (1982) first reported that there was no empirical evidence of relations between empathy and prosocial behavior. However, the early research may have failed to distinguish sympathy from personal distress (Eisenberg & Fabes, 1990). Sympathy consists of feelings of concern or sorrow for the other person. Personal distress is a self-focused aversive emotional reaction. According to Batson (1991), sympathy is associated with the motivation to reduce the other person's distress, which thereby leads to altruistic behavior. In contrast, personal distress is associated with the motivation to reduce one's own distress, which may result

in avoiding contact with the person in need. This view was supported in studies with adult participants (Batson, 1991) and with child participants, including young children. Eisenberg and Fabes (1990) used several methods (self-reports, physiological and facial markers) to measure the emotional reactions when observing another person in need. In case of other-oriented emotions, children are inclined to “help” their peer by comforting, caring, or sharing. These studies underline the functional importance of sympathy (feeling with the victim) for altruistic or prosocial behavior (see review by Eisenberg, Fabes, & Spinrad, 2006; Eisenberg, 2007). In our own studies we have observed processes of emotional reactions when witnessing another person in need; the primary emotional reaction of empathy could evolve into sympathy, or other- or self-focused distress (Trommsdorff, 1995). These emotional reactions were associated with different behavior that was differentiated in line with Barbee (1990) as approach-type helping (solve and support) versus avoidance-type helping (dismiss and escape); or problem-focused helping (solve and dismiss) versus emotion-focused helping (support and escape) (Friedlmeier, 1996). Together, these studies underline the importance of emotion development and regulation in the development of prosocial behavior.

These studies also highlight the role of emotion in goal-directed behavior, thus underscoring our agentic approach. We incorporate a theoretical framework of the development of self and agency in cultural context, borrowing from research on the development of self-construal. Agency is related to control (control of self or control of environment) and to belief in self-efficacy (Bandura, 2001). It is a potent motivating force that is influenced by the socialization of emotion and social behavior, leading to culturally appropriate emotion regulation and social skills. Agency is related to how one construes the self, which differs according to the cultural model of the self (Miller, 2003; Trommsdorff, 2007). Parents socialize their children in line with the predominant cultural values for agency (e.g., of autonomy or relatedness) and the self—for example, as independent or interdependent. As the child acquires a culturally specific self-construal, children’s emotion regulation and social behavior will follow different developmental pathways.

### ***Aspects of Social Competence***

One task of emotional development is learning to establish and maintain positive social relationships, including the ability to initiate and maintain friendships and to respect and comply with the authority of adults. Emotion regulation, including the ability to express emotion appropriately, and emotion knowledge, the ability to understand one’s own and others’ emo-

tions as guides to emotion regulation, are deeply integrated in social competence (Halberstadt, Denham, & Dunsmore, 2001; Lemerise & Arsenio, 2000). Moreover, evidence suggests that emotional competencies are integrally related to the development of social competence (Chen & French, 2008; Denham et al., 2003; Spinrad et al., 2006). Thus, emotion regulation serves the development of social competence.

### ***Universal and Individual Developmental Conditions for Emotional and Social Development***

#### *Universalities*

Universal developmental conditions are partly based on innate biological processes (e.g., maturation) and partly based on universal social processes (e.g., formation of attachment relationships). The biological organism depends on an environment to develop, and this circumstance includes social input that provides an environment in which the neurobiology of social behavior can develop. For instance, in all societies, children typically acquire the rules of conduct of their communities. These rules may differ, and yet universally most children are capable of acquiring and behaving according to the rules of their social worlds (Whiting & Whiting, 1975), although some have impairments that compromise this development. Similarly, children in all societies form emotional attachments with their primary caregivers despite the fact that the means by which attachment is formed and the behaviors that constitute security may differ across cultural contexts (Cole & Tan, 2007).

For the purposes of our chapter, we assume that children have innate capacities for being emotional, for being social, and for engaging in regulatory processes; these capacities permit their agentic motivations to meet their goals for well-being to be modulated by cultural standards for social conduct. From the time the child begins to experience a social environment (including in utero), the specific influences of the child’s particular developmental niche begin to transmit cultural influences on the child’s development, including the rate of maturation as well as the development of behavioral skills (Harkness & Super, 2002). The socialization processes that transmit cultural standards then have their influences on the biological and behavioral development of the child. For example, executive functions first develop in nonspecific ways during the first years of life. Later they are related to the cognitive and conscious processes of emotion and self-regulation in line with the particular cultural values that are transmitted through socialization processes (for an overview of emotional development in young children, see Denham, 1998).

The development of prosocial behavior is a key aspect of social competence (Eisenberg, 2007). Prosocial behavior, such as empathy and altruism, depends upon the development of the self and the ability to coordinate the needs of the self and others. Evidence suggests that the roots of prosocial development can be perceived once the concept of the self has developed. There is evidence that 2-year-old children are beginning to develop a concept of the self. They are able to differentiate their own and others' needs and to display other-focused as well as self-focused emotions (Bischof-Köhler, 2000). However, Bischof-Köhler (2000) did not differentiate between empathy and prosocial behavior.

Other studies also report that self-recognition has been observed in 18- to 24-month-old children (Lewis & Brooks-Gunn, 1979; Lewis & Ramsay, 2004). Attachment fosters the development of the self-recognition. Securely as compared to insecurely attached children showed better self-recognition (Pipp, Easterbrooks, & Harmon, 1992). As early as 2 years of age, children begin to cooperate with social partners (Tomasello, 1999). Cooperation indicates social competence. Further, the growth of prosocial behavior is linked to the development of empathy; as we noted, any prosocial skills reflect an integration of emotional, cognitive, and behavioral processes. For instance, empathy requires the ability to feel concern for another's distress, to understand at a basic level that the other's distress is distinct from your own, and to engage in socially skilled behaviors such as information seeking, support seeking, or caregiving. Twin studies suggest that the emotional aspects of empathy may have a *hereditary* basis, whereas the behavioral elements do not (Zahn-Waxler, Robinson, & Emde, 1992). Thus, the capacity to express concern for others may be more rooted in biological dispositions, whereas how one behaves toward others may be more influenced by situational context and learning.

Concern for others is not generally discussed as a dimension of children's temperament, but negative emotionality, effortful control, and urgency—the main dimensions of temperament—may influence children's proclivity for feeling concern for others. These temperamental dimensions are believed to have extensive influences on emotional and social development. According to Rothbart and Bates (2006), individual differences in infant temperament can be observed for six dimensions: fearful distress (fearfulness), irritable distress, positive affect, (motor) activity level, attention span (persistence), and rhythmicity. These dimensions reflect negative emotionality (fearfulness and irritability) and a global positive emotionality. Attention span can be observed, for example, as affecting effortful control, which contributes to emotion regulation. A longitudinal study has shown that effortful control, an aspect of temperamental regulation, was a more consistent predictor of empathy (especially for boys) than was impulsivity (Eisenberg et al., 2007).

### *Individual Differences*

Genetically influenced temperamental factors do not fully explain individual differences in social development; rather, they account for a child's preferred response tendencies. However, the development of social competence depends on children's ability to behave according to the standards of their cultural niche, regardless of their temperamental tendencies. For this reason, it is fortunate that environmental factors such as parenting can foster self-regulation in children of diverse temperaments (Eisenberg et al., 2005) and in this way promote socially appropriate behavior. Indeed, children predisposed to react negatively to novelty or limitations, and to be less inclined to engage in effortful control, may be particularly dependent on the quality of caregiving they receive from parents and other adults such as teachers.

Positive effects of warm parenting on self-regulation (inhibitory control, emotion regulation) have been shown in several studies (see meta-analyses by Karreman, van Tuijl, van Aken, & Dekovic, 2006; overview by Grusec & Davidov, 2007). Other studies have shown that attachment is a moderator for relationships between parenting and self-regulation (Kochanska, Aksan, Knaack, & Rhines, 2004). Child temperament can also be a moderator of these relationships (Kochanska, 1997). Recent studies focus on the mutual responsiveness between parents and their children as predictors of self-regulation at preschool age (Kochanska, Aksan, Prisco, & Adams, 2008). In general, direct and indirect effects of parenting have to be distinguished (see overview by Grusec & Davidov, 2007). For example, others' self-esteem and self-efficacy beliefs in regulating emotions are positively related to mothers' positive reactions to children's distress and to preschool children's active and successful emotion regulation, while parenting behavior is a mediator (Heikamp, Hoffmann, Suchodoletz, & Trommsdorff, 2009).

Kochanska (1993, 1997) has asserted and demonstrated that the goodness of fit between the child's temperament and the parent's style fosters internalization of standards in children of diverse temperamental tendencies. For example, fearless and fearful children profit most from "sensitive" parenting, that is, parenting that takes into account the child's characteristics (e.g., fearlessness or fearfulness). In case of warm and positive parenting, fearless children are more likely to develop secure attachment relationships and establish a mutually positive orientation that leads to committed compliance from the child; this tendency is more likely despite the fact that fearlessness supports bold, assertive, or impulsive behavior that could be noncompliant. Fearful children profit most from low power assertive parenting. They develop committed compliance, perhaps because low-power parenting helps give children the feeling they are in control of their situa-

tions and reduces the need to be fearful and avoidant. These examples of “goodness of fit” between parenting and children’s temperament may need to be qualified on the basis of the child’s developmental age. Longitudinal studies by Kochanska, Aksan, and Joy (2007) underscore the importance of developmental period. The child’s second year appeared to be most sensitive to parents’ impact on their children’s moral internalization. To summarize, biological and environmental factors influence emotional and social development through direct and indirect processes. Socialization factors, their respective fit with variables of child temperament at various developmental ages, and their mutual interdependencies have to be taken into account. In the next section we discuss environmental influences, especially parents as socialization agents, on children’s emotional and social development, taking into account the role of culture.

### **The Role of Culture-Specific Socialization Conditions in the Development of Emotions and Social Behavior**

#### ***Components of Socialization and the Developmental Niche***

Parenting, including parents’ beliefs and behavior, has been studied as an important factor in the socialization of children in a cultural context (e.g., Bornstein, 1991, 2001; Harkness & Super, 2002; Rubin, 1998; Rubin et al., 2006). In parenting, biological and environmental factors also play a role. Parents differ in their behavior on account of their own biological characteristics—for example, different temperaments or a different sensitivity to their children’s signals. Further, economic and cultural factors influence parenting goals and behavior as part of the process to achieve an optimal adaptation to the resources and constraints of the environment and the needs of the child (Bornstein & Cheah, 2006).

Parenting, development, and culture have long been topics in anthropological research (e.g., Harkness & Super, 2002). Whiting and Whiting (1975) recommended an ecological approach that partly served as a guiding framework for Trommsdorff and Nauck’s (2005) study on the value of children (including socioeconomic and cultural factors). However, it is also important for culturally sensitive work to incorporate bidirectional influences, including how a child’s dispositions shape the child’s experiences. In his ecological systems theory, Bronfenbrenner (1979) specified the interdependent contextual factors on various levels in human development; however, he did not specifically focus on culture.

In contrast, the theoretical framework of the “developmental niche” proposed by Super and Harkness (1997; Harkness & Super, 2006) clarifies

the interface between child development and culture by focusing on the role of parents and their cultural belief systems (parental ethnotheories). The authors point out the importance of studying ethnotheories through their relations to the other components of the developmental niche. The concept of the developmental niche is useful in studying the culturally constructed environment of the child through several lenses of physical and social settings of the child’s daily life and through customs, parental practices, and parental ethnotheories. Within the developmental niche, caregivers, including parents, begin to socialize a child’s behavior as soon as the infant and caregivers begin to interact. For instance, although infants are not yet expected to engage in self-regulated social behavior, they actively express emotions, and the socialization of emotion thus begins early in life (Cole & Tan, 2006). Caregivers hold culturally specific sets of goals for their children’s competence and beliefs about how competence develops (Bornstein & Cheah, 2006; Cole, Tamang, & Shrestha, 2006; Rubin et al., 2006; Trommsdorff & Kornadt, 2003), and these goals likely guide caregivers’ choice of practices, consciously or otherwise, as they respond to their children’s emotions and emotion-related behavior.

#### ***The Role of Parents’ Naïve Theories and Parenting in Emotional and Social Development***

Parents’ naïve theories or ethnotheories include beliefs about the nature of child competence, the means by which children acquire competence, and the appropriate ways that caregivers can foster competence. Their elucidation provides insights into caregivers’ socialization goals and their views of the most significant features of the parent–child relationship. Certain theories may be subtle enough to escape the caregiver’s awareness and therefore not be readily expressible verbally. Parents’ naïve theories are subject to the same distortions as other forms of self-report, as they are also prone to the influences of social desirability, to the imperfections of memory, and to the distortions that risk and psychopathology can introduce when one reports beliefs and practices. It has been asserted that parents’ reports about their children’s characteristics (e.g., temperament) are influenced by personal biases and therefore not wholly valid (e.g., Kagan, 1998). However, many more factors contribute to inconsistencies about direct observations, which usually are sampled in a single situation, and parental reports, which are based on the broader experience of their children in a variety of situations over time but are subject to self-report biases. Beside the well-known sources of discrepancies between parental self-reports and observed behavior (Denham et al., 2000; Rothbaum & Weisz, 1994), specific methodological factors should be taken into account, for example, the researcher’s selection of observed behavior in certain situations or the researcher’s influence on

parents' behavior in such situations (see Arney, 2004, for an overview on studies comparing direct observations and self-report measures of parenting behavior).

Nonetheless, caregivers' naïve theories or ethnotheories are indices of what parents and other caregivers believe to be the goals of socialization and the strategies for achieving them. These ethnotheories reveal the degree to which parents share universal values and the degree to which they hold culturally specific values. Harkness and Super (2006) posit a hierarchical system of ethnotheories that starts with implicit cultural models (culturally shared values and beliefs, e.g., concerning the relationships among family members', parents, and the child) that influence domain-specific beliefs (children's emotion regulation patterns depend on one's age) and that, in turn, influence explicit ideas about appropriate practices and their role in influencing child outcomes (e.g., the child will mature) (p. 71). They also acknowledge important intervening factors such as whether the child's temperament is regarded as an important consideration. These beliefs finally influence the actual parenting practices (e.g., ignoring the child's distress) and, furthermore, the developmental outcome for the child (e.g., the child does not adequately regulate distress).

The characteristics of parents' naïve theories are valuable information in understanding child development (Goodnow & Collins, 1990). Rubin et al. (2006) further maintain that parents' naïve theories predict child outcomes: "For example, there is emerging evidence that parents' ideas, beliefs, and perceptions concerning the origins of the children's acceptable and unacceptable behavioural and emotional styles, in particular, contribute to, predict, and partially explain the development of adaptive and maladaptive behaviour in childhood" (Rubin et al., 2006, p. 82). More cautious about direct prediction, Harkness and Super (2006) state: "Thus, parental ethnotheories by themselves cannot predict child outcomes, but it would be difficult to understand cultural differences in development without reference to how parents in different cultures think about children" (p. 78).

From our point of view it is crucial, especially in cross-cultural or culture-informed studies, to acquire information on parents' beliefs about adequate developmental pathways to the social and emotional competence of their child, including beliefs about their child's characteristics, about their relationship with their child, and their parenting practices, including the way parents structure the social and physical environment of their child (including peer relations) (see Cole, et al., 2006; Trommsdorff & Friedlmeier, 2010). Such information about parents' naïve theories on their child will help them to understand the cultural specificities versus universals in their child's emotional and social development, since the focus is on the subjective meaning of beliefs and behavior. For example, Cole and colleagues (2004, 2006) found that elders in Brahman and Tamang vil-

lages had different criteria for defining child competence, and these differences placed in context observed differences in the socialization of anger and shame in preschool-age children. Similarly, Keller and colleagues (2004) showed video records of German and Cameroonian Nso mothers and infants to the mothers in each nation. When Cameroonian mothers observed the higher degree of *en face* contingent responding between German mothers and infants, they offered to come help German mothers learn how to more easily be close to their infants. Without a means of seeing child behavior and interactions through the eyes of the socialization agent, culturally meaningful information is lost to the scientist. Therefore, we are presently involved in a cross-cultural research project on parents' naïve theories on children's emotion regulation and social development in Germany, the United States, India, Nepal, and South Korea (Trommsdorff, Cole, Mishra, Niraula, & Park, in preparation).

### ***The Role of Cognitive and Emotional Development in the Development of Self-Regulation***

In general, internalization of the rules and values of one's parents or society is premised on positive parent-child relationships. Grusec and Goodnow (1994) articulated the preconditions for achieving successful internalization, including open communication and clarity in rules and values, and the child's acceptance of caregivers' messages. This model is useful in explaining the successful intergenerational transmission of values (Albert, Trommsdorff, & Wisnubrata, 2009; Trommsdorff, 2009b). Positive relationships between children and the primary caregivers in their lives foster this transmission. Secure attachment, one indicator of a positive parent-child relationship, has been shown repeatedly to be associated with children's internalization of values that guide their self-regulation (Grusec & Davidov, 2007; Kochanska, 1997). This view includes, of course, the contribution of children to their sociomoral development and the importance of a good fit between parenting style and the children's temperamental dispositions (Kochanska et al., 2007).

Research on emotional and social development has often tended to overlook the important role of culture. Most research has been conducted with European or U.S. samples, mostly in the United States. Recent cross-cultural studies clearly suggest that there are universal aspects of emotion, including the commonality of certain emotions, that are strongly influenced by the basic neurobiology of the human organism, such as fear and disgust (Izard, 1994; Matsumoto, 2001). However, cross-cultural studies also clearly reveal cultural specificity in the relations between the individual and the circumstances that influence the elicitation, expression, and regulation of emotions (e.g., see reviews by Cole & Tan, 2006; Friedlmeier

& Matsumoto, 2007; Kitayama, Mesquita, & Karasawa, 2006; Trommsdorff, 2006). These cultural specificities seem to be related to cultural values, socialization conditions, and, moreover, to the cultural model of self (Trommsdorff, 2009a). In the next section we deal with the role of culture in the development of emotional and social behavior.

### **The Role of Culture in the Socialization of Emotion, Emotion Regulation, and Social Development**

#### ***The Role of Culture in Socialization Processes***

Caregivers' beliefs, goals, and practices cannot simply be explained by studying their naïve theories. It is more important to understand the *meaning* of the specific naïve theories in the respective cultural context. Parents, for example, are members of a specific culture; the culturally shared values and behavioral practices structure the goals and beliefs of the individual members of a culture (Harkness & Super, 1995). Some parenting actions function as "cultural practices"; these are actions that are shared with others, related to normative expectations, and have a meaning that goes beyond the immediate goals of the action (Miller & Goodnow, 1995). Therefore, childrearing concepts can be seen as a belief system aligned with the values of the society and the individual (Kojima, 1986; Trommsdorff & Friedlmeier, 2004).

Accordingly, culture plays an important role in the socialization process, for example, mediated by parental ethnotheories or naïve theories. In a specific culture, parents may believe that expression of emotions is desirable and that the emotional development of their children should follow this goal. In another cultural context, parents may believe that self-restrained and inhibited expression of emotions is desirable; accordingly, parents may follow this developmental goal and promote related emotion regulation of their children. These differences are observable not only in comparisons among different cultures but also when assessing values, beliefs, and developmental outcomes over time in longitudinal studies. Accordingly, Chen and Chen (2010) report a decrease of shyness in Chinese children over the course of more than a decade, which they associate primarily with peer acceptance (Chen & French, 2008). Obviously, socioeconomic and cultural changes have contributed to a value change, to related changes in socialization conditions, and significant changes in developmental outcomes. Thereby, social competence has adopted a different meaning after a decade of fundamental socioeconomic changes in China.

Cross-cultural studies on emotion have shown that in socialization contexts in which the uniqueness of the self is valued highly open expression of emotions is encouraged by parents, in contrast to contexts in which

the individual's relatedness to others is highly valued and in which parents intend to promote self-restraint in children (e.g., see reviews by Cole & Tan, 2006; Trommsdorff, 2006, 2009a). Furthermore, in cultural contexts emphasizing the interdependence of the individual with others, certain emotions are particularly undesirable, such as anger that has the potential to threaten interpersonal harmony (Cole et al., 2006; Cole, Walker, & Lama-Tamang, 2006). Even in case of an angry conflict of interest, Asian mothers pursued a cooperative and trusting relationship with their child, whereas Western mothers engaged in escalating conflicts based on their attribution of negative intentions to their children (Trommsdorff & Kornadt, 2003). Accordingly, Asian mother-child interactions ended peacefully, while German mother-child interactions ended with mothers' and their children being frustrated. In these various cultural climates fostering different value orientations, self-construals, and motivational and cognitive dispositions (e.g., attribution tendencies), diverse developmental paths emerge with respect to emotional and social development.

In cultural contexts characterized by social orientation and relatedness, parents hold culture-specific beliefs about the desirability of modesty and of social behavior that accommodates others (Rothbaum & Trommsdorff, 2007; Trommsdorff & Rothbaum, 2008). These parental beliefs are usually influenced, supported, and mirrored by such other socialization agencies as teachers and the school environment (Trommsdorff, 2009c). Therefore, it is useful to study relevant aspects of the cultural context and other socialization conditions besides the family in order to better understand the factors influencing the parents' belief system and parenting practices (Bornstein, 1991, 2001; Harkness & Super, 1995).

#### ***The Role of Culture in Emotional and Social Development***

A leading influence on how culture is conceptualized in the psychological literature is the self-construal framework offered by Markus and Kitayama (1991). They postulate that the ways in which an individual views self relative to others are culturally variable and constitute an organizing influence on cognition and emotions that in turn affects social behavior (Markus & Kitayama, 1994). They further underscore psychological motivations for agency and how culture influences value orientations relating to the self's agency and emotions (Kitayama et al., 2006; Kitayama & Uchida, 2005). Although this framework is often applied in differentiating nations, its greatest utility is in understanding that all individuals strive for agency and for relatedness and that cultures vary in the relative value they place on each striving and on the means by which one achieves agency and relatedness.



Rothbaum, Weisz, Pott, Miyake, and Morelli (2000) elaborated on this view in their examination of the culture-specific functional role of attachment. Attachment theory postulates a universal need for autonomy that is supported by satisfaction of the universal need to feel secure. In socialization contexts valuing the interdependence of the self (e.g., Japan), the development of attachment is based on a specific mother-child relationship characterized by a symbiotic relationship (Azuma, 1986; Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000). The assumed universal need of competence underlies a specific kind of agency in Japan—integration in an interdependent relationship that provides assurance (Rothbaum & Trommsdorff, 2007). In contrast, in Western cultures, the need for competence is related to the goal of following the path of independence and separateness. Therefore, depending on the cultural meaning of the assumed basic needs (competence, autonomy, and relatedness) attachment should have different consequences for the child's emotional and social development. Rothbaum, Pott, et al. (2000) integrate research on parenting and the parent-child relationship in lifespan development and suggest culture-specific pathways for emotional and social development. These pathways are related to different cultural models of self—the independent versus the interdependent self. While maintaining harmony is most important in cultures favoring the interdependent model of the self, achieving self-reliance and free expression of one's will is important in cultures favoring the independent model of the self. These values underlie parent-child interactions and the ways in which parents foster emotion regulation and the development of the self and of social competence in their children (Dennis, Cole, Zahn-Waxler, & Mizuta, 2002). In other studies, Japanese mothers responded to their children before they showed distress, while German mothers reacted *after* their children showed distress. These differences in mothers' proactive and reactive sensitivity were related to their children's successful emotion regulation (Trommsdorff & Friedlmeier, 2010; Trommsdorff & Rothbaum, 2008). Accordingly, we next turn to universal and culture-specific aspects of emotion regulation and self-regulation.

### ***Universal and Culture-Specific Conditions of Emotion Regulation***

A first step in considering cultural influences on emotion regulation and self-regulation is to address individual differences in infant temperament. Temperament is presumed to reflect innate, biologically based behavioral tendencies, although recent work highlights the fact that the *in utero* environment may influence infant temperament (e.g., Davis et al., 2007). A recent review reveals that there is much more to be known regarding whether or not there are cultural differences in infant temperament (Cole

& Tan, 2006). We assume that infants vary in temperament in all cultural contexts and that a dimension of these individual differences is variability across infants in their tendencies to react negatively to novelty or limitations. Furthermore, we assume that caregivers in all cultures nonetheless strive to promote a culturally specific standard of social conduct in their children, which affects the socialization of emotion and therefore self-regulation. The basis for the development of self, self-efficacy, and self-regulation, however, has to be seen in both biological and environmental factors, especially in parenting and culture-specific socialization conditions (as already specified).

In order for emotions to contribute to culturally appropriate social behavior, they must be regulated. The literature generally regards this regulation as involving the reduction of negative emotions and, less often, the up-regulation or maintenance of positive emotions. However, what is regarded as negative or positive emotion and how different emotions are valued, varies with the specific culture (Mesquita & Fridja, 1992; Mesquita, Frijda, & Scherer, 1997; Russell, 1994; Scherer, 1997). In Western societies, for instance, joy, happiness, and pride are regarded as positive emotions, their expression is highly valued, and parents encourage their expression (see overview by Cole & Tan, 2007). This pattern is consistent with a self-orientation that emphasizes individuality, uniqueness, and achievement. However, in Asian countries caregivers are less comfortable with their children expressing high levels of these emotions. All parents want their children to be secure, but in Asian countries there is less value attached to happiness and pride (Kitayama, 2001; Kitayama, Markus, & Kurokawa, 2000; Trommsdorff & Rothbaum, 2008; Tsai, Miao, Seppala, Fung, & Yeung, 2007), because these are regarded as lacking sensitivity to the needs of others and detracting from the achievement of calmness, which is more highly valued. However, parents in Asian societies may value other positive emotions, such as empathy or peacefulness; a child's being calm may be more valued than a child's being happy (Morelli & Rothbaum, 2007; Mulder, 1992). Furthermore, there is a positive emotion associated with making others feel relieved or peaceful, a topic related to prosociality that is rarely studied. Accordingly, parents in Asian societies are more likely to refrain from praising their children, focusing instead on how to improve their behavior (Miller, 2002, 2003; Rothbaum & Wang, 2010; Trommsdorff & Rothbaum, 2008; Wang, Wiley, & Chiu, 2008). Negative emotions, on the other hand, are also valued differently across cultures. Perhaps the most well understood difference regards negative self-conscious emotions, such as shame and embarrassment. In the United States, shame is regarded as a particularly toxic emotion because of its effects on self-esteem and its association with risk for psychopathology (Ferguson, Stegge, Miller, & Olsen, 1999; Tangney & Fischer, 1995). However, in some Asian societies,

shame is a valued emotion and parents encourage it because it demonstrates that the child is learning his or her place in relation to authority and in regretting behavior that compromises interpersonal harmony (Kitayama, 2001; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997).

Accordingly, from a culture-informed viewpoint, the socialization of emotion fosters patterns of emotion regulation that are organized in regard to how selves best function in their social worlds. This process is related to the emotion focus (self or social), the role of the self, and the respective positive or negative quality of the outcome of emotion regulation for the self and for others. For example, guilt is a self-focused negative emotion in Western cultures, while shame is an other-focused negative emotion in Asian cultures (related to the fear of losing face—a very negative event). Accordingly, in order to avoid shame and self-regard (loss of face), regulatory behavior may already get started before the emotion is experienced—that is, regulation is regarded as most effective *during* the activity (e.g., achievement) in order to avoid a negative outcome in the Asian context. This would be an example of *anticipatory emotion and self-regulation*: investing persistence, effortful control, delay of gratification, etc., should serve the goal to be considered successful. Similarly, expecting positive emotions such as pride to ensue following successful achievement within the Western context would imply the prior investment of similar anticipatory activities of self-regulation. Thus, *emotion* regulation may require certain activities of *self*-regulation.

### ***Culture-Specific Aspects of Emotion Regulation and Social Development***

We assume that emotion regulation is related to social development and that both are influenced by cultural values and related socialization practices. First, we give examples for the development of emotion regulation in Asian cultures. Then, we deal with prosocial behavior as an example of social development.

#### ***Emotion Regulation***

Javanese are traditionally expected to maintain social harmony. Javanese parents are very patient with their children and typically show little irritation over their misbehavior. Only rarely do the children experience inhibition forced on them by their parents. Older siblings learn to yield to the wishes of younger ones. Therefore, Javanese children rarely experience frustration, as they internalize the rules of emotion regulation and prosocial behavior relatively easily. “It is in this atmosphere of warm togetherness that the Javanese learn to express their own desires, to avoid conflict,

and at the same time not be disappointed” (Magnis-Suseno, 1997, p 168). In order to maintain social harmony, children have to learn their position in the society, to perform their duties, and to internalize ways of emotion regulation and social competence. Since emotion regulation is related to the experience and the expression of emotions, Javanese “strive to control one’s emotions and drives as well as to take an inner attitude of resignation” (p. 193). Here we observe a culture-specific method of emotion regulation that enables Javanese to fulfill their duties in a peaceful, secure (*slamet*), and unfrustrated way: “Outward harmony thus corresponds to an inward condition of *slamet*” (p. 193). In sum, emotion regulation as part of emotional and social competence overlap and indicate maturity, according to the Javanese belief system.

Japanese also focus on harmony as the basic goal of children’s emotion regulation and as an indicator of emotional and social competence (Kitayama et al., 2000; Lebra, 1994; Morelli & Rothbaum, 2007; Trommsdorff & Rothbaum, 2008). Caregivers’ socialization is therefore characterized by a culture-specific way of anticipating children’s needs and emotions and engaging in “proactive sensitive” behavior (Rothbaum & Trommsdorff, 2007; Trommsdorff & Friedlmeier, 2010). Since mothers view a child’s expression of negative emotions as an expression of lack of maturity, they do not react by scolding or blaming the child. Thereby they avoid becoming angry themselves, which would be a bad model for imitation; they also avoid negative attributions and a negative self-evaluation of the child by referring to a malleable cause (“a child is only a child”; that is, the child is not yet mature) (Trommsdorff & Kornadt, 2003).

Indian children also seem to regulate their emotions in accordance with the cultural values of harmony and a peaceful mind. When Indian and German preschool children expected a gift in a box but found the box empty, the Indian children soon regulated their disappointment, guided by the positive reactions of their mothers; in contrast, the German children were frustrated and showed negative emotions such as anger for a while until they were given a present by the experimenter. The German mothers often even encouraged their children’s anger (unpublished data by Trommsdorff, Mishra, Heikamp, Suchodoletz, & Merkel, 2009).

However, not all Asian societies approach childrearing and the socialization of emotion in the same manner. For instance, Cole and colleagues found that Nepalese Brahman caregivers are more likely to engage in emotionally neutral control of their preschool-age children whereas Nepalese Tamang caregivers engage in more affiliative control. In regard to emotion socialization, the Brahmans tend to ignore child shame and to be responsive to child anger, whereas Tamang ignore or punish child anger but are responsive to child shame (Cole et al., 2006). Conversations with elders in these communities about what constitutes competence in a child reveal that

the Tamang prioritize social skills that involve making others feel good, whereas Brahmans prioritize individual achievement, particularly in school. These observations of childrearing and emotion socialization are thus consistent with cultural definitions of competence and likely explain why Brahman children value anger but Tamang children value shame (Cole, Bruschi, & Tamang, 2002; Cole & Tamang, 1998). Importantly, comparative studies within putatively independent or interdependent societies further our ability to understand cultural influences. The socialization of emotion that leads to a child's regulation of emotion and behavior thus relates directly to the child's tendencies toward social behavior.

### *Prosocial Behavior*

The literature indicates that the development of prosocial behavior in children is partly based on heritable genetic influences (e.g., Hastings, Zahn-Waxler, & McShane, 2005) and partly based on environmental influences (e.g., Zahn-Waxler et al., 1992). Psychoevolutionary theorizing underlines the role of emotions (empathy) for prosocial behavior (see Hastings, Utenale, & Sullivan, 2007). Research in Western countries has shown that non-punitive parenting and other-oriented reasoning that activates the child's understanding of the situation fosters prosocial development (Grusec & Goodnow, 1994). However, parenting styles are complex; they are related to parents' naïve theories and goals, and they vary across contexts. Therefore, the specific meaning of parenting should be assessed—and this is even more necessary in case of cross-cultural comparisons.

Prosocial behavior has been associated with parental warmth and child-centered discipline. Also, warm and sensitive parenting should allow for the development of prosocial behavior. However, sensitivity has a culture-specific meaning (proactive vs. reactive sensitivity; see Rothbaum & Trommsdorff, 2007). Further, it does not necessarily imply warmth. However, when taking into account the role of emotions, a clearer picture may emerge. Cultural values of interdependence would undermine the self-other differentiation that is necessary for the experience of empathy (feeling compassion for the other person), a precondition of prosocial behavior. Thereby, distress may also arise when one vicariously shares the unhappy or negative emotions of another person. Accordingly, the child needs to regulate this distress.

Observational studies of 2- and 5-year-old children in Germany and Japan showed that 2-year-old toddlers in both countries were sometimes overwhelmed by their distress when observing another person in distress. They were looking for the support of their mothers in order to be able to overcome their own distress and to engage in helpful acts. These very young children could not regulate their distressing emotions by themselves. Emo-

tion regulation is therefore a necessary skill in both cultures for empathic prosocial behavior (Trommsdorff, 1995), as suggested by Eisenberg (1995). Five-year-old German children, in contrast to Japanese children, could already regulate distress by themselves. In the case of self-focused distress, children acted less prosocially than in the case of other-focused distress or in the case of empathy.

In our four-culture study on empathy, distress, and prosocial behavior, we found again a significant contribution of other-focused distress and of empathy to prosocial behavior. We also have shown that, among children who were socialized in a cultural context favoring interdependence, more other-focused distress occurred and less ability to "interfere" with the distressed state of another person was observed (Trommsdorff, Friedlmeier, & Mayer, 2007). These results underline that distress, empathy, and prosocial behavior have different meanings, depending on the cultural context.

To summarize, emotion regulation can obviously affect aspects of social development in line with cultural values. Cultural values on interdependence undermine aggression; they also can foster other-oriented distress that needs to be regulated efficiently in order not to undermine prosocial behavior (toward strangers) in young children. The cultural values of independence can foster readiness to face conflicts and engage in anger-based aggression while also fostering prosocial behavior based on empathy.

### **Summary: A Cultural Model of Emotion, Self-Regulation, and Social Development**

The basic components of our cultural model are (1) cultural variations in the goals and practices parents have for socializing emotion, (2) the effects these have on promoting culturally specific patterns of emotion regulation, and (3) the role these effects play in promoting culturally defined prosocial behavior. We draw from the work on self-construal to emphasize the universal motivations in humans to strive for both agency and relatedness, recognizing that the ways in which a balance between these strivings is achieved is culturally variable. Culture, in our view, is defined by shared practices that derive from shared values and beliefs. Self-construal develops through the socialization process, which filters cultural values and beliefs. As children develop, they have the opportunity to internalize cultural values and to use these to evaluate themselves and others with whom they interact. Optimally, in each cultural niche, a child feels securely embedded in family relationships and able to explore and learn about the world beyond the family as part of a striving for efficient functioning or a sense of agency. Depending on the child's self-construal, derived in the process of socialization by adults close to the child, the well-adapted child behaves in

culturally appropriate ways to meet personal goals and to maintain good relationships with others.

Ryan and Deci (2000) have assumed that universal needs influence behavior. However, we believe that these universal needs are met differently, depending on the cultural model in which the self develops (Trommsdorff, 2009a). Accordingly, evaluations, motivations, and emotions and emotion regulation develop in culturally variable ways, for example, regulating distress through primary control (changing the environment) or secondary control (changing the self) (Essau & Trommsdorff, 2000; Weisz, Rothbaum, & Blackburn, 1984). All together, the different components underlying the processes of emotion regulation and self-regulation build a pattern that in general fits with the dominant cultural model of the self and allows for optimal culture-specific emotional and social competence.

## Outlook and Conclusions

### *Conclusions for a Culture-Informed Theory on Emotion Development and Social Development*

Research on emotion regulation and social development has so far largely neglected the role of culture. On the other hand, culture-informed research on emotion and social behavior has so far rather focused on the cultural and psychological aspects of the self and neglected developmental psychological approaches. A cultural-psychological approach to the development of emotion and social behavior has to take into account the cultural meaning of socialization conditions (such as parenting and kinds of sensitivity), of emotion and emotion regulation, and of desirable social behavior. As we have seen, beliefs of social competence and desirable behavior can change over time (Chen & Chen, 2010; Chen & French, 2008). Therefore, developmental outcomes of emotion regulation and social behavior can only be evaluated as representing emotional and social competence when their respective cultural meanings are taken into account (Friedlmeier & Trommsdorff, 2002).

We do acknowledge the biologically based universals in the development of emotion and social development. Other universals may be related to internal psychological processes in emotion and social development. However, culture specificities cannot be ignored. These can only be understood when taking the perspective of the respective cultural values and the belief system underlying the socialization conditions and developmental outcomes (Cole & Tamang, 1998; Cole & Tan, 2007; Rothbaum, Pott, et al., 2000; Trommsdorff, 2006; 2009a). A culturally-informed view on the development of emotion and social behavior allows us to evaluate the fit between the cultural model and actual developmental outcomes.

## *Conclusions Regarding Interventions*

Emotion regulation and social behavior are influenced by biological and environmental factors and can become relevant in the development of *problematic* developmental paths. For example, in their recent review Rubin, Burgess, and Coplan (2002) argued that behavioral inhibition (e.g., showing signs of reactive anxiety, distress, or disorganization) is related to *emotion dysregulation* that is possibly determined by temperament. The authors claim that behavioral inhibition is a developmental precursor of social reticence, social withdrawal, and anxiety in childhood and adolescence. Behavioral inhibition and social withdrawal are stable variables. Moreover, social withdrawal in mid-childhood predicts negative self-concept, loneliness, peer rejection, and emotion dysregulation such as depression in early adolescence. The physiological basis of behavioral inhibition has been revealed in several studies (e.g., Fox & Calkins, 1993).

We know from past research that environmental factors can play a significant role in changing undesirable behavior. Thus, we can assume that parents will try to determine whether the development of emotion regulation and the self-regulation of their children are congruent with the "normative" (culturally preferred) cultural model. However, differences in the cultural appropriateness (that is, the cultural fit) of developmental outcomes relating to emotions and social behavior can occur (e.g., dysregulation of inhibited children). Therefore, interventions may become necessary that, in turn, require a theoretical basis and input from empirical research. As we noted, very little research directly addresses cultural influences in the socialization of emotion and self-regulation. Therefore, it is not well known when certain forms of inhibited behavior may be culturally acceptable and, if so, whether this shortcoming reduces the possibility that the inhibited behavior will lead to forms of psychopathology. Of special note is recent work by Chen and Chen (2010) in which the authors demonstrate that recently evolving cultural values in China likely account for changing relations between child inhibition and child behavior problem symptoms. In sum, we advocate for an increase in the number of cross-cultural, within-culture, and culturally informed studies of the development of emotion regulation, self-regulation, and social competence.

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