Available online at www.sciencedirect.com
SCIENCE DIRECT®
Developmental Review 25 (2005) 26–63
DEVELOPMENTAL REVIEW
www.elsevier.com/locate/dr

Taking stock of the developmental literature on shame

Rosemary S.L. Mills*

Department of Family Social Sciences, University of Manitoba, Winnipeg, Manitoba, Canada R3T 2N2

Received 10 November 2003; revised 25 June 2004
Available online 8 October 2004

Abstract

Shame plays a central role in social and self development. This review presents an overview of the existing state of the developmental literature on shame, describing the major developmental theories of shame, research on the sources of individual differences in proneness to shame, and implications for mental and physical health. By toddlerhood, individual variations in proneness to shame emerge, and not long thereafter they are associated with psychological adjustment. Overall, evidence points to a variety of ways in which shame may be promoted, although much of it is correlational and based on retrospective reports by adults. Theory and research on the developmental consequences of proneness to shame indicate that it may be a vulnerability factor in the development of problems such as depression, aggression, social anxiety, and immune-related health problems. This also is correlational evidence and does not establish the etiological role of shame. To address the critical issues, an agenda for future research is outlined.

Keywords: Shame; Self-conscious emotion; Emotion socialization; Developmental psychopathology; Depression; Aggression; Social anxiety; Physical health

* Fax: +1 204 474 7592.
E-mail address: rosemary_mills@umanitoba.ca.

0273-2297/$ - see front matter
doi:10.1016/j.dr.2004.08.001

> It is this ubiquity, this everywhereness of embarrassment that has made it difficult for us to understand that so common a feeling that permeates our existence also affects our lives (Nathanson, 1987a, p. 251).

A person whose daily life is pervaded by feelings of worthlessness and inadequacy is one whom we would describe as "shame prone." A shame-prone person is often in a state of emotional distress and unable to function well in everyday life because of difficulty speaking, thinking, and interacting with others (Lewis, 1971). The distress involves painful self-condemnation, a feeling of being worthless and disgraced, a desire to hide or disappear, difficulty interacting socially, and even difficulty speaking fluently and thinking coherently (Lewis, 1971). Adding to and prolonging the distress, proneness to shame may involve negative self-rumination (Joireman, 2004). Over the long term, proneness to shame may play an important part in psychopathology (Lewis, 1971, 1987) and physical health (Dickerson, Gruenewald, & Kemeny, 2004; Dickerson, Kemeny, Aziz, Kim, & Fahey, 2004). Given its distressing nature and its potential role in mental and physical health, it is important to understand how proneness to shame develops and how it can affect the course of development. Over the last several decades, views about the "self-conscious" emotions (shame, guilt, embarrassment, pride, envy, and empathy) have been changing. Piaget's thinking about the egocentric nature of early cognition and the late development of symbolic thought seemed to suggest that thoughts and feelings about the inner self are not possible until middle childhood. Evidence appeared to support the view that young children are aware of themselves only as physicalistic entities with concrete, perceptually salient attributes such as possessions and activities, and that they lack the representational capacity required to perceive abstract qualities in themselves and others and to realize others' emotional attitudes toward them. More recently, it has become clear that children show self-cognitive and self-affective capabilities at an early age. It is now generally accepted that young children are aware of mental states in themselves and others, can evaluate themselves, and are capable of emotional reactions concerned with the self (Harter, 1999; Lewis & Brooks-Gunn, 1979; Ruble & Dweck, 1995). There is now a general consensus, supported by empirical evidence, that shame emerges early and is present at least by the toddler period. Debate about the timing of its emergence now focuses on the period of infancy (Draghi-Lorenz, Reddy, & Costall, 2001).

The study of self-conscious emotions is considered to be in its early stages (Lewis, 2000). Shame, most particularly, has been neglected in comparison to other self-conscious emotions. This is particularly true of the developmental literature. In contrast to empathy and guilt, which have received considerable attention in relation to the development of conscience, the literature on shame has focused predominantly on distinguishing it from guilt (e.g., Ferguson & Stegge, 1995) and establishing the age at which it emerges (e.g., Barrett, Zahn-Waxler, & Cole, 1993; Lewis, Alessandri, & Sullivan, 1992). There has been relatively little attention to its role in behavior and development. Yet, shame is highly relevant to many of the main topics of study in developmental psychology. It is important in understanding a wide variety of issues, including how discipline affects children, why family conflict and violence occur and

how they affect children, and what increases vulnerability to psychopathology. The purpose of this article is to review progress in understanding the development of shame and the developmental implications of proneness to shame, and to suggest directions for future research.

Developmental theories of shame

Developmental theories of shame fall into one of three general theoretical orientations: functionalist, cognitive-attributional, or object relational/attachment. The differences between them are largely a matter of emphasis. Functionalist theories focus on the adaptive function shame serves in regulating processes within and between the self and others. Cognitive theories focus on the appraisal processes that are the immediate "stimulus events" for the experience of shame. Object relational/attachment theories focus on the impact of early attachments on styles of regulating shame and the role these styles play in self and social development. Below, the main representatives of these orientations are described briefly.

A functionalist perspective

Functionalist theories are based on Darwin's theory of evolution and the notion that emotions have an adaptive function and serve to increase the chances of survival. According to this perspective, emotions are regulatory processes that serve a person's goals (Barrett & Campos, 1987; Saarni, Mumme, & Campos, 1998). Emotions begin when the person appraises an event as significant to some goal. Appraisals may be learned or (due to the prewired nature of some goals) unlearned, and they may be conscious or unconscious. Having a conscious awareness or understanding of relevant events is not required, only the capacity to register their significance and engage in goal-directed behavior. An emotion mobilizes and organizes the individual's adaptive response to events by influencing thought and behavior ("action tendencies"). These organizing effects are highly flexible; hence, emotions can be defined only by their adaptive functions and the action tendencies that serve them. Face, voice, gesture, behavior, and autonomic response have only a probabilistic relation to the emotion, with different instances of an emotion bearing only a "family resemblance." For example, the shame family of emotion encompasses varieties such as discomfort, mild embarrassment, humiliation, and mortification.

In Barrett's functionalist developmental model of shame (Barrett, 1995, 1998a), the adaptive purpose of shame is to maintain others' acceptance and preserve self-esteem (whereas in guilt it is to meet standards of right or wrong), by learning and maintaining social standards and submitting to others. Toward this end, shame has three functions: behavior-regulatory (reducing exposure to evaluation by disengaging or distancing the self), internal-regulatory (focusing attention on social standards and self-attributes), and social-regulatory (communicating deference to others). The action tendencies associated with shame are to withdraw, avoid others, and hide the self (whereas in guilt they are to make reparation and punish the self).

The development of shame occurs progressively through cognitive development and socialization. As children develop the capacity to appraise experiences and form values, standards, and beliefs, shame changes in its incidence and complexity. Less advanced levels of awareness and understanding make it possible for some members of the shame family of emotions to occur in some contexts at some ages (Barrett, 1998a, 1998b). As children develop cognitively and socially, they acquire an increased number and complexity of standards, rules, and goals; they endow more standards, rules, and goals with significance for their self-worth; they become more self-aware and capable of self-evaluation; and they develop new skills and abilities relevant to coping and emotional responding. As a result, more situations become capable of eliciting shame reactions and the ability to control these reactions increases. An important aspect of the model is the notion that a bidirectional relationship exists between shame experiences and self-development. Through its internal-regulatory function, shame draws attention to the self, activates self-evaluation, and contributes to the development of self-knowledge; this, in turn, plays an important role in moral conduct and interpersonal relationships.

Other functionalist emotion theorists have suggested that the social-regulatory function of emotion may play a key role in the emergence of shame. Campos, Thein, and Owen (2004) propose that emotional communication not only regulates emotions but also can be constitutive of emotions. This occurs through the conversion of one emotional response to another. Self-conscious emotions may be constructed from basic emotions (those present at birth) through the reflected appraisals of significant others. More specifically, shame may be constituted by reflected appraisals communicated through disappointment, anger, disapproval, disgust, or contempt expressed by parents and other significant figures. These theorists suggest that, if there is a precursor to shame, it may be "the disappointment and frustration experienced by a child when encountering failure at a task" (Campos, Frankel, & Camras, 2004, p. 384). From the precursor emotion, shame may develop as reflected appraisals come to hold more meaning and are internalized, and as the sense of self develops.

Cognitive-attributional theories

Cognitive theories address the cognitive evaluative processes that elicit shame, and suggest that shame is precipitated by an evaluation of the self as a whole (e.g., Lewis, 1971, 2000; Weiner, 1986). Helen Block Lewis is recognized most particularly for her writings on the distinction between shame and guilt. She suggested that shame is rooted in the need for attachment to others. Rejection by a loved one is a prototypic shame-inducing experience because it is often perceived as a global and uncontrollable rejection of the *self*. Whereas guilt is concerned with rejection due to undesirable *behavior*, shame is concerned with rejection due to *personal* undesirability. The focus of attention in these emotional states is quite different, leading to different thoughts, feelings, and behavioral reactions.

Another important contribution of H.B. Lewis was her discussion of the ways in which shame is repressed or "bypassed." Overt shame involves a *feeling* of being ashamed, i.e., an awareness of autonomic reactions (e.g., rapid heartrate, blushing,

sweating) together with a subjective feeling (e.g., feeling small, helpless, unable to control the situation). As soon as it is felt, shame begins to diminish or recede; it may be labeled as feeling "lousy," "tense," or "blank" (Lewis, 1971, p. 197). In bypassed shame, on the other hand, there is no awareness of shame affect. There is some conscious thought about how one looks to others or that one is inferior, but all that is consciously available may be a "wince," "blow" or "jolt" (Lewis, 1971, p. 197). Bypassed shame is frequently accompanied by "humiliated fury" or "shame–rage," due to the perception that the other's rejection is due to hostility. The coupling of felt rejection and perceived hostility causes a recursive alternation between shame and rage in which each activates the other in sequence (shame-to-rage-to-shame).

According to attributional models (e.g., Lewis, 2000; Weiner, 1986), shame is activated by negative attributions that are internal and global. Lewis (1992) offers a developmental cognitive-attributional model that integrates attribution theory with several of H.B. Lewis's conceptual contributions. The model makes a distinction between emotional *states*, which can occur with little or no cognitive processing, and the *experience* of emotional states, which are conscious or unconscious evaluations of emotional states (Lewis & Michalson, 1983). Emotional experiences require cognitive processes. According to the model, different types of self-attribution are accompanied by different emotions. Negative self-attributions focusing on the whole self elicit shame, while those focusing on a specific action elicit guilt. Shame is blaming the self in its entirety, while guilt is blaming a specific action. Shame experience has three cognitive prerequisites. First, it requires self-consciousness, or the capacity to reflect upon the self ("objective self-awareness"), which does not emerge until $1\frac{1}{2}$ to 2 years of age. However, self-awareness is not sufficient. For self-evaluation to occur, children also must acquire the standards, rules, and goals prescribed by the culture. These standards, and what constitutes success or failure in meeting them, are transmitted to the child through processes of socialization. Although some standards are incorporated early, internalization continues across the life span. Once standards are internalized, children can anticipate others' reactions, evaluate themselves against imagined reactions, and experience shame. This occurs by sometime during the toddler period, between $2\frac{1}{2}$ and 3 years of age.

The nature of self-evaluation depends on a third cognitive prerequisite: attributions about the causes of events and whether the self is responsible (internal attribution) or not responsible (external attribution). An internal attribution prompts an evaluation of success or failure vis-à-vis the standard, and an evaluation that is either global or specific. Global self-attribution refers to the entire self, while specific self-attribution refers to specific attributes or actions. According to the model, self-conscious emotions are a product of specific/global attribution and success/failure evaluation, with pride or guilt resulting when the attribution is specific, and hubris or shame if it is global. Thus, shame is elicited by a global self-attribution of failure, essentially an experience of the global self as undesirable, unworthy, or fundamentally flawed. A major point of the model is the notion that the cognitive evaluation process rather than the situation elicits the emotion. The development of self-awareness makes shame possible, while socialization experiences and

dispositional characteristics affecting specific versus global attribution are responsible for individual differences in the experience of shame. Temperament also plays a role, by determining reactivity to internal stimuli and hence the likelihood of focusing attention internally.

The model also addresses the regulation of shame and the implications of "felt" versus "unfelt" shame (Lewis, 1992). When shame is acknowledged or felt, it can be dispelled in various ways, such as by allowing the emotion to dissipate by itself, shifting attention to something else (e.g., forgetting the experience), or using laughter or confession to put the emotion at a distance. Felt shame can also be reflected upon, understood, and used to change behavior or reappraise experience. When shame is unacknowledged or unfelt, it does not disappear but is pushed from awareness by substituting a less intense emotion. Sadness and anger are the major substitutes because of their close relation to shame. Which one is selected will depend on how accessible it is due to socialization, temperament, and relevance to the situation.

There has been considerable empirical testing of the cognitive-attributional model. In research on the necessity for objective self-awareness, it has been demonstrated in infants up to 24 months of age that embarrassment and empathic behavior are more likely to occur among infants who show mirror self-recognition (self-referential behavior indicative of self-awareness) (Bischof-Kohler, 1991; Lewis, Sullivan, Stanger, & Weiss, 1989; Pipp-Siegel, Robinson, Bridges, & Bartholomew, 1997; Zahn-Waxler, Radke-Yarrow, & Wagner, 1992). Other studies have demonstrated the capacity for shame responding in toddlerhood and examined the role of standards in precipitating shame (Alessandri & Lewis, 1996b; Lewis et al., 1992; Lewis & Ramsay, 2002). For example, in one study (Lewis et al., 1992) reactions to success and failure in achievement situations were examined in children between 33 and 37 months of age. Children were presented with easy and difficult versions of several tasks (puzzle-solving, copying, basketball tossing), and their reactions to succeeding or failing were observed. Shame was defined as showing at least three of five shame signs (body collapsed, corners of the mouth downward/lower lip tucked between teeth, eyes lowered with gaze downward or askance, withdrawal from task situation, negative self-evaluative statement) within 30 s of task failure. Failure was associated with more shame responding with easy than with difficult tasks, suggesting that children's reactions were elicited by self-evaluation in relation to a standard and not simply by sadness about the outcome. Other studies using the same paradigm and method of measuring shame are consistent in showing the capacity for shame responding by toddlerhood (Belsky, Domitrovich, & Crnic, 1997; Kelley, Brownell, & Campbell, 2000; Mills, 2003). In a study involving a contrived mishap conducive to either shame or guilt (Barrett et al., 1993), in which toddlers were led to believe they had damaged a valued object, some children responded with more guilt-like reactions (reparation) and others with more shame-like reactions (avoidance of scrutiny), suggesting that by toddlerhood children may already be differentially prone to these emotions.

Whether children's negative self-evaluative reactions in contexts of failure or transgression can be specifically labeled "shame" or "guilt" on the basis of their expressive signs, has generated some discussion (Barrett, 1998a; Draghi-Lorenz

et al., 2001; Kochanska, Gross, Lin, & Nichols, 2002). Kochanska and colleagues (Kochanska et al., 2002) argue that what is required to use these labels is evidence that individual differences in these affective reactions are stable and predict indices of the emotions over the long term. They have reported moderate stability from 22 to 45 months of age in affective discomfort to transgressions (avoiding gaze, bodily tension, overall distress, negative affect) and predictive relations between discomfort at these ages and indices of morality (tendency to violate rules) at 56 months of age (Kochanska et al., 2002). Whether this is evidence for guilt, shame, or both is not clear, however, because affective discomfort was indexed by signs that are prototypical of shame (avoiding gaze) and signs that are associated with both guilt and shame (bodily tension) in a context that could elicit either or both emotions.

Research testing the cognitive-attributional model indicates that children as young as age 2 years evaluate themselves negatively when they fail to meet standards or goals. The model suggests that these reactions are precipitated by internal, stable, global attributions. In adults, there does appear to be a close relation between shame and attributions of this type (Tangney, Wagner, & Gramzow, 1992). In children, these attributions may not be quite the same cognitive operations. Current thinking about children's understanding of stable, dispositional characteristics is that children may not understand traits as characteristics reflecting some underlying motivation until 7 or 8 years of age. Children use terms such as good, bad, nice, mean, kind, and the like, but these terms may reflect global or absolute evaluations (good vs. bad, nice vs. not nice) rather than inferences from consistent patterns of behavior understood to be stable motivations (Ruble & Dweck, 1995). While an absolute evaluation may be a kind of internal, stable, global attribution, the limitation in young children's ability to reflect on underlying motivations and think about them as enduring entities may have some implications for the feelings of shame the attribution activates. Shame states may be somewhat short-lived, involving less thinking about the defectiveness of the self. Over time, however, through their internal-regulatory function, such shame states may contribute to the development of dispositional thinking and pessimistic attributions through their biasing effect on cognition. Research could explore these reciprocal influences between shame experiences and social-cognitive patterns.

Object relational/attachment theories

Freud himself paid relatively little attention to shame, focusing instead on guilt feelings arising from conflicts between the moral standards of the superego and the impulses of the id or ego. However, contemporary psychoanalytic theorists of the object relations school have written extensively about shame. Object relations theories assume that social relationships are a basic biological need (Greenberg & Mitchell, 1983). Emotions related to social relationships are considered fundamental and foundational in development. Several theorists of the object relations school have put forward developmental models of shame. Bowlby (1973) did not focus explicitly on shame, but he strongly implied a connection between attachment and shame when he suggested that internal working models of the self are complemen-

tary to those of the attachment figure. A child unwanted by parents "is likely not only to feel unwanted by his parents but to believe that he is essentially unwantable, namely unwanted by anyone" (Bowlby, 1973, p. 238). The major theoretical contributions to understanding the development of shame from an object relations perspective have been made by Nathanson (1987b, 1992), Kaufman (1985, 1989), and Schore (1994, 1996, 1998). Following H.B. Lewis, these theorists consider shame to be an interpersonal or attachment emotion that occurs when the relational bond is disrupted. They present integrative models that synthesize object relations or attachment theory with affect theory (Tomkins, 1962, 1963) and with research on infant development. According to these theories, shame is an affect that can be experienced directly, unmediated by abstract cognitive processes, from earliest infancy. It does not require self-reflection.

Nathanson (1987b, 1992) suggests that shame alerts the individual to actions or attributes that could elicit rejection by others and motivates efforts to prevent this rejection from occurring. Drawing upon affect theory, Nathanson proposes that, from birth, shame is triggered by interruptions in the infant's sense of connectedness. According to affect theory, affects are the biological portion of emotion, meaning-free physiological mechanisms whose function is to amplify the stimulus events that set them in motion. Shame is a "drive auxiliary" affect, meaning that it operates to attenuate or reduce positive affects associated with basic needs. Shame is activated by any experience that requires a rapid *unwanted* decrease in the innate affects of interest-excitement or enjoyment-joy. It dampens these affects and causes the infant to disengage. Nathanson cites the "still face" experiment (Tronick, Als, Adamson, Wise, & Brazelton, 1978) as demonstrating shame affect as early as $2\frac{1}{2}$ to 3 months of age. In the still-face paradigm, the parent changes abruptly from being responsive to nonresponsive during a face-to-face interaction with their infant, and infants typically look away and become distressed. According to Nathanson, these reactions are due to the physiological experience of shame, which produces a loss of muscle tone in the neck and upper body, an increase in skin temperature on the face, and incoordination. This disruption to normal functioning produces a sense of incompetence, which directs attention to the self and, over time, helps shape self-perception.

The still-face paradigm has been used to investigate infants' early sensitivity to caregiver unavailability. It exposes young infants to an experience of unresponsiveness in a face-to-face interaction with their parent. The parent is instructed, following a period of normal face-to-face play with their infant, to turn away and then back, adopting a neutral expression and staring at the infant while remaining still, and then to turn away and back again, resuming normal face-to-face play. Infants' affective responses typically are more negative and less positive in the still-face interaction than in normal play interaction. For example, in a study investigating stability and change in still-face effects between 2 and 6 months of age (e.g., Moore, Cohn, & Campbell, 2001), the majority of infants either cried or cried and smiled; all spent a large percentage of the time looking away from their mother. This pattern was stable across age, with the only change being an increase in looking away from the mother. It appears that infants are at least mildly upset by the still-face situation, try to

reengage the parent, and become distressed at the lack of responsiveness. The situation is sufficiently stressful to produce a cortisol response (Haley & Stansbury, 2003).

Other data reinforce the idea that infants' distress in the still-face situation is due specifically to the lack of contingent response and not simply the parent's facial expression. Reactions are attenuated by physical contact during the still-face period (Stack & Arnold, 1998; Stack & Muir, 1992), and by 4 months of age the effect occurs even when mothers pose a happy rather than a neutral still face (Rochat, Striano, & Blatt, 2002). Moreover, maternal sensitivity predicts how upsetting the situation is for the infant. Mothers' contingent responding to their 4-month-olds during normal face-to-face interaction was associated with less negativity and more looking at the mother during the still-face condition (Braungart-Rieker, Garwood, Powers, & Notaro, 1998; Braungart-Rieker, Garwood, Powers, & Wang, 2001). The relation between maternal sensitivity at 4 months of age and attachment security at 12 months of age was partially mediated by still-face reactions (Braungart-Rieker et al., 2001). These findings suggest that, as predicted by attachment theory, infants' experiences of caregiving contribute to the expectations they develop about the responsiveness of other people. At 4 months of age, infants' responses to the still-face situation appear to be influenced by their expectations, with positive expectancies serving to modulate distress when expectancies are violated.

However, there is no evidence that the still-face paradigm elicits *shame* in particular. In studies using Izard's coding system to examine infants' specific facial expressions during the still-face episode, shame almost never occurred and the most frequent negative affective reactions were anger followed by sadness (Lewis & Ramsay, 2004; Weinberg & Tronick, 1996). Moreover, studies of the link between parent and child expressivity in infancy indicate that there is substantial concordance between mother and child affect in infancy (Malatesta, Culver, Tesman, & Shepard, 1989); if mothers are negative, infants tend to be negative. Thus, there is no evidence for the notion that breaks in connectedness due either to noncontingent responding or negative responding trigger shame in infancy. Rather, they appear to be frustrating and anger-inducing.

Kaufman's (1985, 1989) model likewise takes affect theory as its foundation and proposes that shame is triggered interpersonally by disappointed expectations of mutuality of response or breaks in the "interpersonal bridge." One of the main concerns of the model is the specific interpersonal activators of shame. These are assumed to vary as the child grows older and progresses through a widening network of settings. Similar to the position of Nathanson, Kaufman's model posits that in the earliest years violations of expected mutuality and expressions of parental anger will be experienced as ruptures and will be shame-inducing. In childhood, shame will be activated by methods of control in the family, the peer group, or the school that involve deliberate shaming by direct exhortation ("shame on you" with an angry or disgusted face), disparagement or belittling, blaming, contempt, or humiliation. Pressure to meet others' expectations to perform or excel, and expressions of disappointment upon failure, also may be potent activators of shame. Cultural values are yet another source of shame; children learn to identify with the

values of their cultural group, and experience shame when they fall short of the ideals. Finally, in adulthood, a significant source of shame is believed to be a sense of powerlessness in any sphere of life that is essential for security (e.g., relationships, work, home, health).

Kaufman argues further that, as children develop, shame is internalized. This occurs through the storage in memory of images or "governing scenes" of repeated experiences linked to affect. These governing scenes contain beliefs derived from messages communicated in the original event (e.g., self-appraisals), an image of interaction patterns (a script of the event, including the behavior of self and others and the causes and consequences of the interaction), and an image of the "internalized other" (the parental figure, usually manifested as an inner voice). According to Kaufman, shame can become linked to affects (e.g., experiencing anger as shameful), physiological drives (e.g., experiencing sexuality as shameful), or innate interpersonal needs (experiencing needs for relationship, touching/holding, identification, differentiation, nurturing, affirmation, and power as shameful). Once it is internalized, shame can be activated wholly from within by experiences of affects, needs, or drives that have become associated with shame in memory, and it becomes possible for shame feelings and thoughts to trigger each other in an "internal shame spiral" that reinforces shame and extends it to other parts of the self. Shame can now be experienced as a deep sense of defectiveness. To protect the self from this overwhelming sense of defectiveness, defensive strategies are developed, such as rage, contempt, striving for perfection or for power, blaming, internal withdrawal, humor, and denial. Inadequate defenses lead to psychological disorder, which will take different forms depending on the nature of the individual's governing scenes.

Schore's (1994, 1996, 1998) regulation theory integrates attachment theory with affect theory and developmental neurobiological research. The caregiver plays a critical role in regulating the infant's states, by stimulating the infant into optimal states of alertness and positive affect and modulating nonoptimal hyperaroused states. This occurs through attuned affective communication in which the caregiver matches and synchronizes to the infant's inner state, and then fine-tunes the intensity and duration of the stimulation so that it stays within the infant's information processing capacity and helps to keep the infant's affect positive. Attunement regulates the infant's states, influences the development of the brain systems involved in affect regulation, amplifies and maintains pleasurable states and leads to the development, by about 14–16 months of age, of an expectation of sharing such positive affect with the caregiver.

The development of this expectancy makes shame possible. Coinciding with this development, the caregiver becomes more of a socializing agent. Misattunements occur more frequently and are used intentionally to inhibit and restrict pleasurable states and promote the development of self-control. Misattunements violate the infant's expectation, causing a sudden deflation of positive affect and a rapid shift to a negative state. This "rapid state transition from a preexisting positive state to a negative state" (Schore, 1996, p. 69) is shame. On a physiological level, shame is a sudden inhibition of excitement involving a rapid shift from energy-mobilizing, sympathetic-dominant autonomic nervous system activity to energy-conserving, parasympathetic-dominant autonomic nervous system activity. It is a stress

response. In order to regulate these shame experiences, the infant requires reattunement or "interactive repair" by the caregiver. The quality of these shame-regulation experiences influences the excitation-inhibition balance of the stress response system, thereby contributing to the regulation of reactivity that determines temperament. The quality of these experiences also influences the development of internal working models of the self and others. Interactive repair helps the infant develop an internal working model of interactions as positive and reparable, the caregiver as reliable, and the self as effective. By about 18 months of age, these representations are symbolic, allowing for the self-regulation of shame. Repeated experiences of unrepaired misattunement and associated shame will lead to insecure attachment, dysregulated shame, and proneness to shame.

Schore's position is that misattunement activates the orbitofrontal cortex, which controls the regulation of negative emotions and is dominant in controlling the hypothalamic–pituitary–adrenal (HPA) and the sympathetic–adrenomedullary (SAM) systems. These two synergistic systems mediate the stress response, the energy-expending SAM system by mobilizing energy and the energy-conserving HPA system by shutting it down. However, although there is evidence that activation of the right prefrontal areas is associated with the experience and expression of negative, withdrawal-related emotions (Davidson, 2004; Davidson, Jackson, & Kalin, 2000), and shame does appear to be associated with a stress response (Dickerson et al., 2004; Lewis & Ramsay, 2002), there is no evidence for Schore's suggestion that misattunement activates these circuits or necessarily precipitates a withdrawal-related emotional response in infants. Rather, when infants' expectations are frustrated by the disruption of a contingency, whether it be in a social or a nonsocial context, the predominant response is not shame but rather anger, with sadness a secondary response (Lewis, Alessandri, & Sullivan, 1990; Lewis & Ramsay, 2004; Sullivan & Lewis, 2003; Weinberg & Tronick, 1996).

Summary

Developmental theories are in substantial agreement regarding the essential nature of shame. Shame is concerned with how the self is regarded by others – the "self-in-relationships" (Barrett, 2000). Whether it is evoked by an actual social interaction or is experienced in private, it is a socially aware emotion concerned with the real or imagined acceptability of the self in others' eyes. There also appears to be some agreement about the cognitive prerequisites for shame to become functional. There is consensus that shame gradually evolves into a more complex form as a child develops, although there continues to be some debate about the level of awareness or understanding required by these prerequisites (Barrett, 1998a; Draghi-Lorenz et al., 2001). Temperament plays a role by influencing physiological processes that contribute to a child's reactivity to shame induction, and may itself be shaped by shame experiences. On the empirical side, there is some support for the idea that shame emerges as children become self-aware, acquire standards and learn to evaluate themselves against them. There is also evidence that these prerequisites are in place by about $2\frac{1}{2}$ to 3 years of age. However, children's understanding of psychological

causality at this age is somewhat limited, suggesting that shame experiences at this age may not be accompanied by thoughts of deep defectiveness. This may come a few years later when children begin to understand traits as pervasive and enduring qualities.

The development of proneness to shame

What are the sources of individual differences in proneness to shame? Theories of shame generally agree that proneness to shame results from the synergistic effects of shame-promotive experiences and temperamental characteristics affecting the magnitude of response to these experiences. A wide range of experiences may be shame-promotive. For purposes of describing the literature relevant to each type of experience, they will be discussed separately, but many of them overlap. Although the literature focuses primarily on parents, it is important to note that family systems (Loader, 1998; Scheff, 1995), nonparental adults, siblings, peers, and the culture play significant roles as well.

Variations in children's proneness to shame are examined by assessing emotional responses in situations that might elicit shame. According to functionalist theories, emotions are flexibly organized to serve their adaptive purpose and will be manifested in a variety of different ways depending on the context in which they occur (Lewis & Michalson, 1983). An emotion can be inferred from patterns of expressive behavior (including physiological activation) that reflect the action tendency associated with it. Using this approach to measurement, a number of studies of shame have been done using a failure paradigm. In this paradigm, children are given tasks to complete and a shame response is inferred from a pattern of expressive behavior reflecting hiding or avoidance. As described earlier, a number of studies using this paradigm have revealed individual differences in shame responding in two- and three-year-olds (e.g., Belsky et al., 1997; Kelley et al., 2000; Lewis et al., 1992). They also reveal more pronounced shame responding in girls than in boys (e.g., Barrett et al., 1993; Lewis et al., 1992).

In older children and adults, the typical approach is to present hypothetical scenarios together with a set of response options, one of which describes affective, cognitive, or behavioral reactions reflecting shame (Ferguson, Stegge, Eyre, Vollmer, & Ashbaker, 2000b; Tangney, 1996; Tangney, Wagner, Burggraf, Gramzow, & Fletcher, 1990). An additional assumption of scenario-based measures is that, once shame becomes a disposition or schema, it facilitates the encoding, storage, and retrieval of schema-consistent information, such that the selection of the response option will be biased toward the shame option. These measures assess the degree to which respondents are shame-schematic, i.e., tend to access shame and its associated appraisals readily across situations. For example, in the well-known Test of Self-Conscious Affect for ages 8–12 (Tangney et al., 1990), children imagine themselves disadvantaging others (e.g., damaging property, getting the best grade), and rate the likelihood of different responses, one of which captures the subjective feeling of shame (e.g., "I would run upstairs to be away from everybody"). As is the case with younger

children, studies with older children and adults consistently indicate that females are more prone to shame than males (Tangney & Dearing, 2002).

Experiences of rejection

According to object relational/attachment theories of shame (Schore, 1994, 1996), the continual experience of misattunement or rejection exposes the child to repeated experiences of unregulated shame.

Insecure attachment

In his regulation theory, Schore (1994, 1996) suggests that the attachment style the child develops is essentially the child's style of shame regulation. When the parent is consistently emotionally inaccessible, support for affect regulation (raising low arousal or modulating high arousal) is lacking and shame serves to help the child self-regulate by disengaging. The parent's unavailability or rejection fosters a strategy of emotionally withdrawing and excluding from higher levels of processing emotions that activate the need for attachment.[1] The child inhibits and minimizes the expression of emotions related to attachment, and is anxious, inhibited, and prone to felt or conscious shame (insecure-avoidant). When the caregiver is inconsistently accessible and tends to persistently engage the infant, interfering with the infant's attempt to disengage in order to modulate arousal, the child does not learn to disengage. The child has difficulty in modulating arousal, is high in negative emotions (irritability, hostility), is impulsive, and has shame that is unfelt or bypassed (insecure-resistant).

The only studies of the link between attachment and shame that have been done guided explicitly by attachment theory have focused on adult attachment (Gross & Hansen, 2000; Lopez et al., 1997). Lopez and colleagues had undergraduate students complete measures of adult attachment styles, proneness to shame and to guilt, and orientation to relationship problem-solving. The measure of attachment style was based on Bartholomew's (1990) model of adult attachment, which distinguishes among four styles according to whether the internal working models of self and others are positive or negative: secure (positive self and other), fearful (negative self and other), preoccupied (negative self, positive other), and dismissing (positive self, negative other). Students with ''preoccupied'' or ''fearful'' attachment styles scored higher on a self-report measure of shame-proneness than those with ''secure'' or ''dismissive'' styles. No attachment-style group differences were found for proneness to guilt. Gross and Hansen (2000) had undergraduate students complete the same measure of adult attachment styles and administered a different self-report measure of shame-proneness. The findings were similar to those of Lopez and colleagues: shame was inversely related to secure attachment, positively related to fearful and preoccupied attachment, and not related to dismissing attachment. Because the fear-

[1] The ability to keep material out of consciousness is thought to emerge sometime around 18 months of age (Greenspan, 1979).

ful and preoccupied styles were both associated with negative self-perceptions, these findings could be interpreted to mean that proneness to shame is related not to attachment styles but rather to self-perceptions, an association that has been established in other research (Tangney & Dearing, 2002).

There has been no research investigating predictive relations between early parental sensitivity or quality of attachment and subsequent proneness to shame. There is one study that focused on the dimension of parental intrusiveness and its effect on shame in young boys (Belsky et al., 1997). Observations and parent reports of child temperament (positive and negative emotionality) were obtained at 12 and 13 months of age, the parenting of mothers and fathers was observed at home at 15, 21, 27, and 33 months of age, and boys were observed responding to success and failure at 36 and 37 months of age. After controlling for the effect of early temperament, which was nonsignificant, there were significant predictive effects of mothers' behavior, with maternal intrusiveness (imposing goals without regard to what the child is doing) predicting less shame responding. This finding is intriguing in light of Schore's (1994) suggestion that high-intensity affective stimulation by the mother will be associated with negative emotionality, impulsivity, and bypassed shame. To the extent that intrusiveness promotes hyperarousal and negative emotionality in the child, the finding of less behavior expressive of shame in boys with more intrusive mothers seems to fit with Schore's regulation theory. However, because the findings ran counter to expectations, before they can be given much weight they need to be replicated to establish their reliability.

Sibling favoritism

Another potential source of shame for a child is the actual or perceived parental favoring of a sibling. Gilbert, Allan, and Goss (1996) suggest that favoritism engenders shame by sending a negative message about the child's relative importance or value. In support of this idea, shame-proneness in female university students was associated with memories of parental favoritism of a sibling and feelings of inadequacy compared to a sibling (Gilbert et al., 1996). Although the link between favoritism and shame has not been investigated at younger ages, it is noteworthy that when school-age children asked to recall a time when their mother said or did something that hurt their feelings, they commonly reported episodes of favoritism toward a sibling (Mills, Nazar, & Farrell, 2002). Their feelings of hurt encompassed feelings of rejection and negative self-perceptions.

Abuse, trauma, or other stigmatizing

The link between physical abuse and shame has been investigated in preschoolers (Alessandri & Lewis, 1996a, 1996b). Maltreated girls showed less pride in response to success and more shame in response to failure in achievement situations, compared to nonmaltreated girls. Maltreated boys, on the other hand, showed less pride and shame compared to nonmaltreated boys, perhaps reflecting a stronger tendency to cope by masking emotions.

Another mechanism by which abuse or trauma may induce shame is stigmatization (Lewis, 1992, 1998). Any experience or characteristic that deviates from

accepted standards of society is a mark or "stigma" that "distinguishes a person as being deviant, flawed, limited, spoiled, or generally undesirable," (Lewis, 1998, p. 131) – a global negative attribution by the social group. The deviations that are stigmatized by society are many and varied, including physical appearance, age, sickness, disability, and physical and sexual abuse. According to Lewis's (1992) attributional model, feeling stigmatized involves making a negative global self-attribution. The effect of stigmatization was investigated in a study of children and adolescents from 8 to 15 years of age, known to have been sexually abused and seen within two months of the discovery (Feiring, Taska, & Lewis, 1998). It was found that the more abuse events to which children had been exposed, the more children's general attributional style was self-blaming (internal, stable, and global attributions for negative events) and the more they reported feeling shame for the abuse. In other analyses with the same sample (Feiring, Taska, & Chen, 2002a), *abuse-specific* internal attributions were strongly related to shame, and shame mediated relations between these attributions and symptoms of psychological distress. In keeping with the notion of stigmatization, abuse may precipitate a process of looking inward, blaming the self for the abuse, and feeling shame.

Shaming experiences

From a functionalist perspective, emotional experiences that occur repeatedly in everyday life become the basis for affective biases or traits (Fischer, Shaver, & Carnochan, 1990; Jenkins & Oatley, 2000; Malatesta & Wilson, 1988). The repeated experience of a discrete emotion reinforces its organizing effects on cognition and behavior, until it becomes a characteristic way of feeling and acting reflecting the development of a schema in which the emotion is perceived, experienced, and expressed more readily than other emotions. In this way, a variety of experiences may foster the development of proneness to shame.

Shaming family environment

Continual exposure to a shame environment may promote the development of a disposition to shame. It has been suggested that when parents themselves are prone to shame or involved in ongoing conflict that triggers shame experiences, children may chronically experience "empathic shame" (shame induced by the shame of another) (Lewis, 1992), leading to a disposition to shame through a process of modeling self-blaming attributions. The sense of helplessness experienced in such an environment may further contribute to shame-proneness by fostering feelings of inefficacy and reinforcing self-blaming attributions. However, research has yet to establish these potential links between shame environments, self-cognitions, and proneness to shame.

Shame–rage cycles in family interaction

Conflict theorists (Retzinger, 1991; Scheff, 1995; Scheff & Retzinger, 1991) suggest that unacknowledged shame leads to shame–rage cycles not only within but also between people, leading to destructive conflict in interpersonal relationships. A "repetitive cycle of insult and revenge" (Scheff, 1995, p. 393) occurs, in which shame is

hidden and felt only as rage. No research has been done to determine whether children exposed to a family environment of shame–rage cycles become more prone to shame. However, studies of children's reactions to interparental conflict provide evidence that children who are bystanders to hostile conflict between others experience shame. For example, Grych and colleagues (Grych, 1998) found that exposure to more hostile marital conflicts (disparaging remarks, interrupting) in an analogue situation was related to self-reports of greater distress, anger, sadness, helplessness, shame, and self-blame in 7- to 12-year-old children. Thus, being a witness to shame-induction may engender feelings of shame.

Shaming parent–child interaction

Children may also experience shame in the context of discipline. There is consensus among socialization theorists that to highlight the significance of appropriate behavior, discipline must expose the child to negative emotions, but at relatively mild levels that are not so distressing that they impair the parent–child relationship (Eisenberg & Fabes, 1998). Optimally, discipline elicits low-level negative emotions that are short in duration due to interactive repair (Schore, 1998). Parents themselves seem to operate on this belief. There is some evidence that parents regard shaming as an important way to promote the child's social and moral development, as long as it is not used to harm the child (Fung, 1999; Fung & Chen, 2001). In a longitudinal study of Taiwanese parents, starting when their children were $2\frac{1}{2}$ years of age, parents expressed the belief that it is necessary for children to feel ashamed when they transgress (Fung, 1999). However, parents viewed shame as harming self-esteem when making the child feel ashamed is the end in itself rather than a means of socialization.

It is often suggested that there are cross-cultural differences in the extent to which shaming occurs. Ever since Benedict (1946) proposed the distinction between "shame cultures" and "guilt cultures," the notion that some cultures emphasize shame-induction and others guilt-induction to socialize children and regulate social conduct has attracted attention (Creighton, 1990). Drawing upon prevailing views about the nature of shame and guilt, Benedict proposed that shame cultures use external sanctions, or punishment from the outside, whereas guilt cultures use internal sanctions, or punishment from the inside.[2] From current perspectives (Killen, 1997), characterizing cultures in terms of emphasis on shame versus guilt may now seem overly simplistic and stereotyping. Parenting styles and practices are recognized as having different meanings in different cultural contexts and, therefore, have different implications for children's development. This appears to be the case with authoritarian parenting, which was associated with less warmth toward the child in parents from an individualistic culture, but not in parents from a collectivistic culture (Rudy & Grusec, 2001). Shaming, too, may have different meanings and consequences for development in different cultures. Fung (1999; Fung & Chen, 2001) found that although Taiwanese mothers believed in using shaming to socialize their children,

[2] Prevailing views at the time also included the belief that shame originates earlier in human development and is therefore primitive, "childish," and inferior, whereas guilt begins at a later stage and is therefore advanced, mature, and superior.

they also put considerable emphasis on restoring the child's sense of belonging in shaming interactions. From these data, there is no evidence to suggest that collectivistic cultures emphasize unrepaired shaming or promote proneness to shame more than other cultures.

However, there may be cultural differences in the socialization of this emotion, its situational precipitants, its expression, or its developmental consequences. In research comparing Taiwanese and American mothers' attributions about their toddlers' misdeeds (Chiang, Barrett, & Nunez, 2000), it was found that Taiwanese mothers are more likely than American mothers to blame themselves. Thus, shame may a shared experience between parent and child in some cultures more than in others. There is also some evidence to suggest that different cultures may convey different rules about coping with and communicating shame (Cole, Bruschi, & Tamang, 2002). Thus, there are potentially important cultural differences in the socialization of shame and in the developmental consequences of shame that require investigation.

Parental overcontrol

Excessive parental control may foster shame. A distinction has been made between behavioral control, which involves having rules and limits and enforcing them consistently, and psychological control, which involves manipulation of the child's emotions, autonomy, and attachment to the parent (Barber, 2002). Excessive psychological control by parents or significant others could engender shame, either indirectly by treating the child as weak and incapable (overprotection) and leading to a sense of uncontrollability and inefficacy (Chorpita & Barlow, 1998), or directly by devaluing the child (e.g., love withdrawal, criticism, belittling, ignoring, neglecting) and fostering a sense of not being important, close, or valuable to others (Leary, Koch, & Hechenbleikner, 2001). One source of the gender difference in proneness to shame may be the greater control exerted over girls than boys in some domains (Pomerantz & Ruble, 1998).

Several studies have examined the link between parental overcontrol and proneness to shame. Two studies focused on adults' retrospective reports about the quality of the caregiving they received during childhood (Gilbert et al., 1996; Lutwak & Ferrari, 1997b). In both studies, university students (women only in Gilbert et al., 1996) completed measures assessing shame-proneness and perceptions of each of their parents on the dimensions of care (warmth/affection) and overprotection/control. The same measure of parenting was used in the two studies. The results of the two studies were very similar, with shame being related to lower parental caring and higher protectiveness (maternal protectiveness only in Lutwak & Ferrari, 1997b).

A prospective longitudinal study that focused on the effect of authoritarian control on proneness to shame in young girls yielded similar findings (Mills, 2003). Authoritarian parents are demanding and directive, place a high value on obedience and conformity, and are unresponsive and even outright rejecting when the child fails to meet their expectations. These harsh and punitive attitudes may be the basis for global negative self-attribution and shame. To test this hypothesis, girls were followed from age 3 to age 5 years. Authoritarian orientation to parenting was assessed by having mothers and fathers complete a Q-sort measure (Block, 1981). Shame

responding was assessed at both ages by observing girls' emotional reactions to failure and to criticism. After controlling for the stability of shame responding across age, which was reasonably high, it was found that girls whose mother *and* father had been relatively authoritarian at age 3 were more likely to show shame responding at age 5.

Hurtful messages

Retrospective evidence suggests that frequent exposure to hurtful parental messages may engender proneness to shame. Shame-proneness in university students was associated with memories of parental "put-down" and shaming ("told me I was stupid or foolish," "made me feel inadequate," "put me down," "made me feel embarrassed about myself") (Gilbert et al., 1996) and retrospective accounts of emotional abusiveness in childhood (Hoglund & Nicholas, 1995). While no prospective studies have been done to examine the link between hurtful communication and shame-proneness in childhood, a study of children's recollections of hurtful episodes (Mills et al., 2002) is suggestive. School-age children (7-to-10-year-olds) were asked to recall and describe a time when their mother had said or done something to hurt their feelings. After describing an incident, they were asked about their feelings. The more children reported feeling hurt by something their mother said or did, the more they indicated that they would feel rejected and negative about themselves. Thus, there is reason to believe that hurtful messages may induce feelings of shame in children. When such messages occur continually over an extended period of time, they may lead to a disposition to shame.

Shame–rage cycles in parent–child interaction

Coercive interaction cycles in parent–child interaction are considered an important risk factor for maladjustment (Patterson, 1982; Scaramella & Leve, 2004). Patterson (1982; Patterson, Debaryshe, & Ramsey, 1989) found, in sequential analyses of parent–child interactions in families of oppositional children, that sequences of attack and counterattack occurred at high rates. It is possible that shame–rage plays a role in escalating coercive interactions. There is evidence that certain interactions may be shame-inducing for both parent and child (Mills et al., 2002). When asked (separately) to describe hurtful episodes, it was quite common for both children and mothers to describe interactions involving discipline and disparagement (disrespect, criticism, rebuff). To the extent that hurtful messages are shame-inducing, there may be parent–child interactions in which both mothers and children are vulnerable to shame and shame–rage cycles are highly likely to occur. This is a conjecture that needs to be investigated.

Parents with fragile self-esteem may be particularly vulnerable to shame–rage cycles. Research on the effects of perceived power on parental behavior (Bugental & Happaney, 2002) indicates that parents with a sense of low power feel threatened in challenging caregiving situations and are inclined to respond in a harsh (hostile) or coercive manner in an attempt to restore a sense of control. Although it has not been investigated, parents with low perceived power may be vulnerable to feelings of shame in these situations. When such feelings are unacknowledged, they may

trigger shame–rage, activating or further escalating coercive interaction cycles. This is another avenue for investigation.

Socialization of standards, rules, goals, and attributions

From a cognitive-attributional perspective (Lewis, 1992), proneness to shame is mediated by the development of high standards and expectations and an attributional style of internal, stable, and global attributions about negative events. Lewis (1992) suggests that the way children's behaviors, and events generally, are interpreted and evaluated by those around them provides children with the rules by which they learn to interpret and evaluate themselves. When children continually receive feedback that is predominantly negative and blames their inner traits, they may acquire standards and values that focus on these traits and develop a general attributional style in which failure is attributed to these traits and success is attributed externally (a "depressogenic," "helpless," or "pessimistic" style).

Unrealistic expectations may become the source of doubts about personal adequacy and a basis of shame. Whether these expectations are communicated verbally or not, they inevitably find expression. They may also be modeled from the parent's own self-expectations. In a correlational study examining parental attitudes associated with shame in 5- to 12-year-olds (Ferguson & Stegge, 1995), parents completed measures assessing their attributions, emotional reactions, and responses to their child's failures, successes, transgressions, and morally correct behavior, and were administered a Q-sort measure of the discrepancy between their expectations of how their child ideally would be or behave and how their child actually is or behaves. Shame was more pronounced among children whose parents were hostile, low in recognition of appropriate behavior, and perceived their child as falling short of their ideals for certain personal traits and the ability to exercise self-control. Although high parental expectations were associated with shame, the direction of effects is unclear from these data.

Several studies have addressed the link between parental feedback and proneness to shame (Alessandri & Lewis, 1993, 1996b; Kelley et al., 2000). To measure shame and pride responding in these studies, children were observed reacting to achievement situations in which they succeeded or failed. Relations between shame responding and parental feedback about performance in these achievement situations were examined. Parents who made fewer positive and more negative comments on their children's task performance had children who exhibited more shame in response to task failure (Alessandri & Lewis, 1993, 1996b). When parental feedback was assessed in a different context from the one in which shame responding was assessed, the results were the same (Kelley et al., 2000). Maternal specific negative feedback during a teaching task at 24 months of age predicted shame at 36 months of age, while intrusive control during the task was not predictive.

It must be noted that, in all of these studies, global negative attributions by parents were seldom observed, and hence it was not possible to determine whether parents of shame-prone children were more inclined to give this type of feedback. Although there is not as yet any unequivocal evidence that negative internal, stable, and global attributions foster shame, there does seem to be a connection between

negative feedback and shame. Moreover, girls appear to receive more negative feedback (Alessandri & Lewis, 1993). In a study of parents and their 3-year-old children, girls received more negative feedback and less positive feedback than boys (Alessandri & Lewis, 1993). Even among maltreated preschoolers, girls received more negative feedback than boys (Alessandri & Lewis, 1996b).

The overuse of certain forms of praise may also foster shame. Praise may convey low expectations of ability or unrealistically high expectations, or it may suggest that the child's worth depends on performance. It may undermine intrinsic motivation, foster a sense of contingent self-worth and helplessness, and create self-consciousness that heightens negative self-awareness and disrupts performance (Henderlong & Lepper, 2002; Kamins & Dweck, 1999). These processes are likely to contribute to the development of a self-blaming attributional style.

Finally, parentification, an extreme kind of role reversal in which the parent looks to the child for acceptance, understanding, or support, may foster shame by conveying unrealistically high expectations. There is one study supporting a link between parentification and shame-proneness (Wells & Jones, 2000). University students completed a scenario-based measure of self-conscious emotion and reported retrospectively on parentification during childhood (e.g., "At times I was the only one my mother/father could turn to"). Parentification was significantly related to shame-proneness even with the shared variance with guilt-proneness controlled; it was not related to guilt-proneness with shame-proneness controlled.

Emotion-related socialization

It has been suggested that parents' socialization of emotions – their reactions to emotions, discussion of emotions, and expression of emotions – has an impact on children's emotion regulation abilities (Eisenberg, Cumberland, & Spinrad, 1998; Gottman, Katz, & Hooven, 1996, 1997). Two aspects of parental emotion socialization that are highly relevant to the regulation of shame affect will be highlighted here.

Parents' approach to emotions

Gottman and colleagues (Gottman et al., 1996, 1997) have suggested that parental meta-emotion philosophy – parents' organized set of feelings and thoughts about their own or their child's emotions – has an impact on the quality of parenting and affects the development of children's emotion regulation abilities. For some people, emotions are an accepted and welcome part of life, while for others they are threatening, a disruptive force, and something to be avoided. In exploratory work with parents of 4- to 5-year-olds (Gottman et al., 1996, 1997), parents with an "emotion-coaching" philosophy were aware of emotions in themselves and in their child, viewed their child's negative emotion as an opportunity for intimacy or teaching, validated their child's emotions, and helped their child label emotions and solve the problems that led to them. Parents with an "emotion-dismissing" philosophy viewed negative emotions as potentially harmful, believed in dealing with these emotions by ignoring or denying them as much as possible so that they would go away, and were neither insightful about their child's emotions nor helpful in problem-solving.

Children whose parents had a coaching philosophy were, at age 5, better able to soothe themselves physiologically by focusing attention (as indexed by suppression of vagal tone); good physiological regulators, in turn, were better at regulating emotionally driven behavior at age 8. At age 8, good behavioral regulators were doing better in several domains (peer relations, achievement, health). Thus, a coaching philosophy appeared to influence emotional behavior regulation through effects on physiological self-regulation. Coaching parents were low in parental derogation (derisive humor, intrusiveness, criticism), but low derogation was not related either to physiological regulation or to behavioral regulation. The implication of these findings is that by talking to their children about their negative emotions, coaching parents may help their children to regulate their emotions and lower their autonomic arousal.

Discussion of emotions

It is unclear what the "active ingredients" of emotion coaching are or what may mediate its effect on affect regulation. The discussion of emotions may play a key role by promoting emotional awareness. Unconscious processing of emotional stimuli has been shown to occur primarily at the subcortical level (e.g., Lane, 2000), indicating that such stimuli are excluded from cognitive processing. Research on "emotion talk," which begins at a very early age, suggests that it may help children attend to emotional states, learn to represent them, reflect upon them, and thereby clarify and control them (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986; Eisenberg et al., 1998; see also Lane & Schwartz, 1987). For example, discussions with toddlers in which mothers explicitly explained the causes and consequences of affective states predicted the children's ability to discern what others may be feeling (Dunn, Brown, & Beardsall, 1991).

Mothers may talk more and use more socioemotional language than fathers (Leaper, Anderson, & Sanders, 1998), and do more coaching of emotions (Gottman et al., 1997). Research also indicates that mothers give more explanations in emotion talk with sons than with daughters, and are more inclined to label emotions with daughters than with sons (Cervantes & Callanan, 1998; Fivush, 1989). Fivush (1989) suggested that mothers may encourage boys to engage in problem-solving and emotional control, and may encourage girls to focus on emotional states and sensitivity. The extent to which gender differences in proneness to shame may be due to differences in the socialization of coping strategies requires investigation.

The influence of temperament

Shame-promotive experiences are likely to have the most pronounced effects on children with biological attributes that make them more reactive to shame induction. The idea that temperament partially mediates the self-conscious emotions has been accepted for some time. In the context of guilt, Dienstbier (Dienstbier, 1984; Dienstbier, Hellman, Lehnhoff, Hillman, & Volkenaar, 1975) suggested that children with different temperaments might be inclined to develop different attributional styles and levels of guilt. Children who are temperamentally prone to high levels of anxiety or

stress (“behavioral inhibition” to use Kagan’s terminology) are likely to experience more discomfort or distress following a transgression and, because the tension comes from within, they will more readily attribute their behavior to something internal. Over time, the child who is reactive to stress is more likely to develop an internal attributional style and a strong sense of guilt than the child who is relatively unperturbable or invulnerable to tension. Kochanska and colleagues provide evidence to support this link between temperament and guilt (e.g., Kochanska, 1991; Kochanska, DeVet, Goldman, Murray, & Putnam, 1994).

In a similar vein, Lewis (1992) suggests that children who are temperamentally disposed to self-focused attention are less able to block internal stimuli and tend to focus more on their own bodily sensations. This internal focus of attention should facilitate the development of self-awareness and should be a predisposing factor in the tendency to make negative global self-attributions about failure. Indeed, Lewis and Ramsay (1997) found that infants who showed self-awareness (self-recognition) were more reactive to stress, as indicated by the magnitude of their cortisol response to a painful inoculation, than those who did not show self-awareness. In other research (DiBiase & Lewis, 1997), embarrassment was related to temperament. In this study, infants were assessed for temperamental difficultness at 5 and 13 months of age by both parent ratings (fearfulness, negative mood, unadaptability) and a physiological measure (heart rate variability). They were assessed for embarrassment at 22 months of age by exposing them to potentially embarrassing situations (e.g., an overly complimentary experimenter). Children with a more difficult temperament at 5 and 13 months were more easily embarrassed at 22 months of age.

Another way in which temperament may influence the development of proneness to shame is through the child’s capacity to regulate emotions by controlling attention. According to Rothbart’s (Rothbart & Bates, 1998) theory of temperament, there are two primary dimensions of temperament, one involving reactive processes (e.g., threshold, intensity, duration of responses) and the other involving self-regulatory processes (inhibiting, activating, or changing responses). Regulatory processes serve to manage reactive processes. Regulatory processes involving attention regulation, in particular, should have implications for the regulation of shame. Providing indirect support for this, lower attention focusing and shifting capacities were associated with greater susceptibility to internalizing problems in middle childhood (Eisenberg et al., 2001; Eisenberg, Shepard, Fabes, Murphy, & Guthrie, 1998). Internalizing problems are generally considered to reflect difficulty regulating internalized emotions and are associated with higher levels of shame (Ferguson et al., 2000b). Thus, while more direct evidence awaits research, attention regulation processes may be additional temperamental characteristics influencing the development of proneness to shame.

Summary

The “everydayness” of shame is apparent from the variety of ways in which this emotion may be elicited, but much of the research to examine the effects of shame-promotive factors on the development of individual differences in proneness to

shame has yet to be done. Very few studies have examined the link between shame-promotive factors and the development of proneness to shame, and of these, most have relied on retrospective reports by adults. Retrospective studies suggest that proneness to shame is associated with early experiences of parental overcontrol, parentification, favoritism toward a sibling, overt shaming, and/or abuse. However, there has been almost no developmental research examining the nature of these associations, and aside from a few exceptions, shame-promotive experiences and temperamental contributors have not been examined together.

The developmental consequences of proneness to shame

A key developmental issue concerning shame is its implications for mental and physical health. Optimal experiences of shame are a normal and inevitable part of everyday life and play an important role in healthy development. However, continual experiences of shame may be unhealthy. In adults, proneness to shame appears to be associated with a wide variety of psychological symptoms (e.g., anxiety, social phobia, fear of negative social evaluation, depression, anger, aggression, externalizing blame, substance abuse, feelings of inferiority, somatization, and eating disorder symptoms) (Andrews, Qian, & Valentine, 2002; Lutwak & Ferrari, 1997a; Sanftner, Barlow, Marschall, & Tangney, 1995; Scheff, 1995; Tangney, Burggraf, & Wagner, 1995).

Similarly in middle childhood, shame-proneness appears to be associated with both internalizing and externalizing problems (Ferguson et al., 2000b; Ferguson, Stegge, Miller, & Olsen, 1999). In one study (Ferguson et al., 1999), children between 5 and 12 years of age were administered a scenario-based measure of self-conscious emotions and were asked to justify the emotional reactions they chose (''why would you feel that way?''), while their parents completed a checklist of child behavior problems. The more children's responses and justifications involved shame (feeling bad, blaming the self) the more they were rated by their parents as having internalizing and externalizing problems. In another study (Ferguson et al., 2000b), children between 6 and 13 years, including some who had been referred for internalizing or externalizing problems, completed self-report measures of internalizing symptoms and a scenario-based measure of shame. Proneness to shame was associated with internalizing symptoms.

Although in studies of children only the broadband internalizing and externalizing categories have been investigated, consistent with the adult literature they suggest that shame may be associated with a wide range of psychopathologies. What is not clear from research with adults or with children is what role shame may play in the development of these problems. Evidence linking it to major childhood disorders will now be considered.

Shame and depression

According to cognitive-attributional shame theorists (e.g., Lewis, 1971; Lewis, 1992), shame is the affective state precipitated by internal, stable, global attributions

about the causes of negative events. When states of shame occur over a prolonged period of time, this attributional bias becomes a general cognitive style. Cognitive theories of depression suggest that a general style of making internal, stable, global attributions for negative events and external, unstable, specific attributions for positive events is ''depressogenic.'' According to the hopelessness theory of depression (Abramson, Metalsky, & Alloy, 1989), a depressogenic attributional style is a diathesis or vulnerability factor in depression. Stressful events trigger depressogenic, pessimistic thinking which, in turn, precipitates depression.

Developmental studies tend to support this model by early adolescence (Abela, 2001; Turner & Cole, 1994). For example, Abela (2001) found that depressogenic attributional style interacted with negative life events to predict increases in depressive symptoms over a six-week period in seventh-grade children but not in third-grade children. Interestingly, a measure of feeling bad about the self, which may be construed as measuring shame-proneness, interacted with negative life events to predict increases in depressive symptoms in third-grade girls. These data suggest that shame is a contributing factor in depression, at least for females.

Research on the consequences of sexual abuse provides further support for the contributing effect of shame (Feiring et al., 1998; Feiring, Taska, & Lewis, 2002b). In a sample of sexually abused children and adolescents, depressogenic attributional style and feelings of shame about the abuse mediated relations between abuse severity (number of abuse events) and adjustment problems (depressive symptoms, lower self-esteem) at the time of abuse discovery (Feiring et al., 1998). Although these effects did not hold when they were assessed longitudinally from the time of discovery to a year later (Feiring et al., 2002b), improvements in shame and in attributions during this year were related to improvements in adjustment, strongly suggesting a causal relation.

How shame may contribute to depression is not clear. In research with adults, shame was uniquely associated with depression beyond depressogenic attributional style itself in female and male undergraduates (Tangney et al., 1992), suggesting that it contributes additional vulnerability beyond that of cognitive style itself. Research addressing reciprocal influences between depression and cognition suggests that depression itself may lead to an even more negative cognitive style (e.g., Nolen-Hoeksema, Girgus, & Seligman, 1992), possibly through rumination focused on one's distress and leading to increased self-criticism (Lyubomirsky & Nolen-Hoeksema, 1995; Pomerantz & Rudolph, 2003). Shame is likely to be activated in this ruminative process, exacerbating self-criticism and depressed affect (see also Andrews et al., 2002). Shame may also be a moderating factor in the development of depression. Research is needed to test this hypothesis.

Shame and aggression

Researchers have begun to distinguish between different subtypes of childhood-onset aggression, and to describe the trajectories of development that define them (Frick & Ellis, 1999; Shaw, Gilliom, Ingoldsby, & Nagin, 2003). One subtype has been characterized by a temperamental style of high emotional reactivity (behavioral inhibition or fearfulness) accompanied by higher susceptibility to anger, exposure to

parental undercontrol interfering with the development of self-control and internalization of rules, and temperamental impulsivity (Frick et al., 2003; Hastings, Zahn-Waxler, Robinson, Usher, & Bridges, 2000; Rubin, Burgess, & Hastings, 2002). Another subtype is characterized by low emotional reactivity (low behavioral inhibition or "fearlessness"), failure to develop concern for others, and coercive cycles in parent–child interaction that reinforce aggressive behavior and engender parental hostility and rejection (Patterson, 1982; Patterson, DeBaryshe, & Ramsey, 1989; Shaw et al., 2003).

In either or both of these subtypes, shame may be an important contributing factor due to its close connection to rage. Elaborating on the notion of shame–rage (Lewis, 1992, 1993) makes a distinction between anger as a response to interference with a goal and rage as a response to intense wounding of the self, and suggests that shame–rage occurs in response to intense wounding due to continual shaming by others. Shame-rage is likely to lead to aggression directed at the person who induced shame or displaced onto safer targets. Over time, shame–rage reactions can be expected to foster a hostile interpersonal style involving wariness and distrust of others, a tendency to attribute hostile intentions to others, and a tendency to generate hostile solutions to interpersonal problems. To date, however, the role of shame in problems of aggression has been neglected.

Abusive treatment involving overt attacks on the self (physical and/or psychological) may be highly likely to promote shame–rage and hostile aggression. Although evidence for a causal connection is lacking, links have been established between maltreatment and proneness to shame (Alessandri & Lewis, 1996a), and between maltreatment and hostile attributional processes (Price & Glad, 2003). In turn, hostile attributional bias has been shown to contribute to acts of aggression (Burks, Dodge, Price, & Laird, 1999a; Burks, Laird, Dodge, Pettit, & Bates, 1999b; Dodge, Bates, & Pettit, 1990). There is a strong possibility that shame plays a mediating role in the relation between maltreatment and the development of a hostile subtype of aggression. Shame–rage may be a factor in steering development along a pathway in which a recursive shame-to-rage-to-shame process fosters a hostile cognitive style, disinhibits acts of aggression, and undermines empathy and concern for others (Hastings et al., 2000).

Shame and social anxiety

Because it involves concern about the acceptability of the self, several theorists have suggested that shame is inextricably bound to feelings of insecurity and anxiety about negative evaluation by others (Bowlby, 1973; Buss, 1980; Lewis, 1986; Schlenker & Leary, 1982). Although in adults there is evidence for a link between shame and social anxiety (Gilbert & Miles, 2000; Lutwak & Ferrari, 1997a), to date no research has been done to determine whether shame contributes to the development of social anxiety in childhood. However, there is a strong theoretical rationale for thinking that it may be a contributing factor.

Anxiety has been characterized as a sense of uncontrollability focused on possible future threats or potentially negative events (Barlow, 2002). Developmental the-

ories of anxiety attribute the development of anxiety to interactions among factors that contribute to a sense of uncontrollable and unpredictable threat (Albano, Chorpita, & Barlow, 2003). Barlow and colleagues (Barlow, 2000, 2002; Chorpita & Barlow, 1998) propose that anxiety develops from the synergistic effects of temperamental proneness to negative emotions, a history of overcontrol by others that intensifies perceptions of uncontrollability, and early learning experiences that result in specific anxieties. In another model, focusing specifically on social anxiety, Rubin and colleagues (e.g., Rubin & Burgess, 2001) suggest that transactions between a child with an inhibited temperament and parents who are psychologically overcontrolling will foster insecurity and anxiety, interfering with social exploration and the acquisition of social skills, and leading to negative social self-perceptions and social anxiety.

Experiences of uncontrollability or anxiety involve both a sense of threat (anxiety) and a feeling of inefficacy (shame) (Bowlby, 1973; Buss, 1980; Lewis, 1986; Schlenker & Leary, 1982). Moreover, through their organizing effects on cognition, these emotions may activate each other. In states of anxiety, children will tend to spend more time focused on their internal feelings of discomfort. As a result, they will be more likely to make internal attributions about their conduct (Dienstbier et al., 1975) and will be more susceptible to self-blame and shame. In states of shame, children will tend to focus attention on their unacceptability to others, heightening concern about negative evaluation by others and increasing feelings of anxiety about social situations. Thus, over time, shame may contribute to an elevation in social anxiety. Given its suggested role in the development of depression, shame may be an important factor in the high comorbidity between social anxiety disorder and depression (Chavira, Stein, Bailey, & Stein, 2004; Wittchen, Stein, & Kessler, 1999).

Shame and physical health

Proneness to shame may represent a chronic stressor. Cortisol responses reflect activation of the hypothalamic–pituitary–adrenal (HPA) axis, one of the neuroendocrine systems that play a central role in the body's adaptation to challenges or stressors. In a meta-analysis of stress responses in healthy adults (Dickerson & Kemeny, 2004), the magnitude of cortisol responses to different types of stressors (e.g., public speaking) was examined as a function of the context in which the stressor occurred. Cortisol responses were more pronounced when the stressor occurred in a context where negative evaluation could occur, and even more pronounced when this was coupled with uncontrollability, i.e., when failure was the likely outcome. In an experiment in which people were assigned to give a speech and complete a math task either in front of an evaluative audience or alone (Gruenewald, Kemeny, Aziz, & Fahey, in press), those in the evaluative condition reported more shame and other self-conscious emotions and greater increases in cortisol from pre- to post-stressor than those who performed alone. The two conditions were not associated with any differences in other reactions to the situation (e.g., difficulty, anxiety), suggesting that the condition effect was specific to self-appraisal.

Direct evidence that negative self-evaluation is stressful is provided by a study in which 4-year-olds were given a series of tasks to do, some they did successfully and some they failed (Lewis & Ramsay, 2002). Children who reacted to failure with expressive signs of negative self-evaluation (shame or embarrassment) had a more pronounced cortisol response to the testing session than those who did not show negative self-evaluation. In a study of 6-month-old infants' emotional responses to the violation of an expectancy in social (still face) and nonsocial (contingency learning) situations (Lewis & Ramsay, 2004), sadness (the response to an unattainable goal) was associated with more pronounced cortisol responses to the violation, but anger (the response to interference with a goal) was not. The sense of uncontrollability common to both shame and sadness may account for their association with a physiological stress response.

To the extent that it is a psychological stressor, shame may have implications for physical health. Excessive or prolonged stress can overload the stress response system and take a toll on the body (e.g., McEwen, 1998). Over a prolonged period of time, proneness to shame may be associated with detrimental effects on physical health. Dickerson and colleagues (Dickerson et al., 2004) propose that shame and other withdrawal-related emotions activate physiological processes (stress response, immune response) that play a role in adaptation to uncontrollable situations by producing central effects that induce behavioral disengagement (e.g., reduced exploration, social disinterest) and reduce energy expenditure. The immune system contributes to this energy-conserving adaptation by increasing levels of inflammatory processes. If the cortisol response system becomes exhausted and fails to provide the usual inhibition of the immune system's inflammatory response, inflammatory processes will increase, potentially leading to autoimmune and inflammatory disturbances.

There is some evidence to support the idea that negative self-evaluation affects immune functioning and that the effect may be specific to shame (Dickerson & Kemeny et al., 2004; Strauman, Lemieux, & Coe, 1993). In a laboratory experiment on the effects of self-blame on two markers of immune activation (Dickerson & Kemeny et al., 2004), students were assigned to one of two writing conditions, one designed to induce self-blame (writing about past traumatic experiences that made them feel bad about themselves) and the other not (writing objectively about activities in the last 24 h). On each of three consecutive days, students participated in the assigned writing exercise, provided a saliva sample pre and post, and rated their emotional states pre and post. One of the two immune markers showed an effect of the self-blame induction. A pro-inflammatory cytokine, sTNFαrII, which is released by activated macrophages, an immune cell involved in the inflammatory response, was elevated in the self-blame group but not in the other group. Moreover, increases in shame, but not in guilt or general negativity, were significantly albeit weakly related to increases in sTNFαrII.

Taken together, these data linking shame to cortisol reactions and to immune activation suggest that shame may be a significant psychological stressor and a potential health risk. However, its functional relation to health outcomes has not yet been demonstrated. There also are many questions that need to be addressed concerning its potential health effects, including the extent to which they may be deter-

mined by factors such as the nature of shame experiences (their source, severity, intensity of affect), the circumstances in which they occur (how prolonged or chronic), and the presence of individual vulnerability/protective factors (e.g., genetic predispositions, personal resources).

Summary

Shame has been linked to a variety of psychological disorders in adults and to broadband internalizing and externalizing problems in children. It may play a role in depression by exacerbating negative self-evaluation; it may underlie aggression that is motivated by rage; and it may exacerbate social anxiety by heightening fear of negative evaluation by others. Evidence is also beginning to emerge to suggest that it may have immune-related physical health effects. However, the establishment of these etiological roles awaits research.

Directions for future research

Shame plays a central role in social and self development. Theories have been advanced to explain how it develops and how maladaptive shame affects developmental outcomes. By toddlerhood, individual variations in proneness to shame emerge, and not long thereafter it is associated with indices of adjustment. There are many potential sources of proneness to shame, but almost no prospective research has been done to establish that they contribute to the development of proneness to shame or that shame has consequences for development. Many questions have yet to be systematically addressed, but are ripe for investigation.

There is a need for research on the developmental trajectories leading to proneness to shame

With a few exceptions, research on the factors contributing to the development of proneness to shame has been correlational. To provide the clearest developmental data, prospective research is needed in which the predictive relations between antecedent factors and proneness to shame are tested after controlling for prior shame-proneness. In keeping with current multilevel perspectives on development, this research needs to assess the determinants of shame at all levels from the biological to the societal. It also needs to describe the common developmental pathways leading to shame-proneness. Does proneness to shame most often culminate from a shaming family environment, shame-inducing patterns of parent–child interaction, the cumulative effects of multiple sources of shame-promotive experience, the synergistic effects of experiences and temperamental characteristics, or simply emotion socialization practices that fail to support the development of emotion regulation abilities? Are some pathways associated with the development of more pronounced proneness to shame and/or earlier onset of adjustment problems? What mediating processes are associated with different pathways? Answers to these questions have important implications for the development of strategies for prevention and intervention.

There is a need for research on the processes mediating the development of proneness to shame

Theories of shame are clear about the cognitive-affective structure that underpins the development of proneness to shame. It has been variously described as a schema of the self-in-relationship-to-others, a self-blaming attributional style, and a relational schema of rejection. Whether self-schemas and attributional style are at different levels of explanation could be examined. A schema of the self as unwanted or rejected may encompass a self-blaming attributional style, due to shame-promotive experiences that foster both. Through influences between these cognitions, a positive feedback loop may form in which a negative self-schema maintains or increases self-blame and self-blaming attributions maintain or increase the negativity of the self-schema. Studies of these cognitions through prospective designs, laboratory experiments, or analysis of "on-line" processing during shame induction, would help to identify the processes underpinning the development of proneness to shame.

There is a need to examine coping strategies that may contribute to proneness to shame

Children's strategies for coping with shame should be an important factor determining whether or not they become prone to shame. By reason of temperament, experience, and the intensity of distress, children may use ineffective strategies that maintain and increase distress. Strategies of problem-solving or engaging with the stressor or one's emotions (information-seeking, problem-solving support, emotional expression) are associated with better adjustment than those of disengagement (avoidance) or negative cognitions about the self or the situation (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). One ineffective strategy that may contribute to the development of proneness to shame is self-rumination, a tendency to engage in recurrent negative thinking about the self. Evidence in adults linking a temperament of behavioral inhibition with a ruminative response style (Leen-Feldner, Zvolensky, Feldner, & Lejuez, 2004) provides evidence to suggest that self-focused attention may increase the likelihood of rumination. Due to its internal-regulatory function of self-focusing, shame may increase the likelihood of self-rumination. Such rumination may amplify shame and worsen self-blame. Although there is evidence in adults linking shame and rumination (Cheung, Gilbert, & Irons, 2004; Joireman, 2004), the data are correlational and do not establish the nature of the link. Another ineffective strategy for coping with shame may be emotion substitution (Lewis, 1992), in which shame is unacknowledged and another less painful emotion (usually sadness or anger) is put in its place. Unconscious or unfelt shame is inaccessible to coping strategies that might modulate it, and continues to affect thinking, behavior, and physiology as long as it is outside awareness. A high priority for future research is to identify the coping strategies that increase or decrease the risk of proneness to shame and investigate the processes through which they affect shame.

Both general and specific forms of shame require investigation

Although it is defined and assessed as a global trait, it is not actually known whether proneness to shame is a global trait, a circumscribed trait pertaining to specific domains, or a global trait that tends to be more pronounced in some domains

than others. Kaufman (1989) proposes that distinctive profiles of shame develop, created by the affects, drives, interpersonal needs, and purposes to which shame becomes attached. For example, a child held to strict standards of acceptability for physical appearance would become more prone to shame related to their appearance. A child shamed for expressing anger may become prone to shame especially in this context. Extrapolating from evidence indicating that parents accept anger from girls less than they do from boys (Birnbaum & Croll, 1984), it can be speculated that girls may be more prone to shame about the expression of anger. According to Kaufman, profiles cluster into general dimensions of shame: body shame, competence shame, and relationship shame. There is some evidence that dimensions of shame can be distinguished (e.g., Andrews et al., 2002), and some research has assessed predictive relations between certain shame-promotive experiences and shame in specific domains (e.g., sexual abuse and body shame; Andrews, 1995). However, there has not been systematic research to assess shame in different domains and determine what particular types of early experiences may channel development toward more pronounced shame in specific domains. One of the impediments to this research at present is a lack of measures for assessing shame in multiple domains.

Gender differences in contexts or domains of shame also require investigation. If girls are in fact more prone to shame than boys, there are plausible explanations. One possibility, based on gender role expectations, is that girls are expected to be more submissive than boys and hence are socialized to *experience* this emotion more than boys. Another possibility, based on gender role stereotypic traits, is that girls *display* submissiveness and vulnerability to a greater extent than boys. It has been suggested, however, that current measures of proneness to shame may underestimate boys' shame-proneness due to an emphasis on situations involving standard violations related to the gender role for girls (e.g., showing interpersonal insensitivity) rather than of boys (e.g., being physically weak) (Ferguson & Eyre, 2000; Ferguson, Eyre, & Ashbaker, 2000a). These potential gender differences are an important priority for future research.

Research is needed on the role of shame in developmental trajectories to psychopathology and health

Research to describe developmental trajectories leading to major developmental health outcomes and to identify their main causal factors is at an early stage (e.g., Zahn-Waxler, Klimes-Dougan, & Slattery, 2000). Proneness to shame may be one of the important causal factors in these pathways. As suggested in this review, it may play different roles in different disorders. Research on its role in developmental trajectories leading to major disorders should inform interventions for preventing these disorders, and should be coupled with intervention research to increase understanding of the way in which developmental pathways to shame can be altered.

There is a need to consider the emotional dynamics of psychological disorders

Finally, it is becoming clear that psychological disorders cannot be understood without taking into account the patterning of emotions involved (Zahn-Waxler et al., 2000). Shame is sometimes labeled a hidden emotion, because it tends to be

concealed from view. As a result, its role in psychological problems has not only been overlooked but is difficult to recognize. In a subtype of aggression mediated by a hostile attributional bias, shame–rage may play a crucial role by chronically arousing feelings of hostility. In depression, sadness is the most salient emotion, but it may be a substitute for shame and/or a consequence of shame-related hopelessness. In social anxiety, fear of negative evaluation may in large measure be due to feelings of shame. Research to better understand the constellation of emotions involved in psychological disorders, and the role that shared emotion components may play in comorbidity, is likely to reveal the ubiquity of shame in such disorders.

References

Abela, J. R. Z. (2001). The hopelessness theory of depression: A test of the diathesis-stress and causal mediation components in third and seventh grade children. *Journal of Abnormal Child Psychology, 29*, 241–254.

Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review, 96*, 358–372.

Albano, A. M., Chorpita, B. F., & Barlow, D. H. (2003). Childhood anxiety disorders. In E. J. Mash & R. A. Barkley (Eds.), *Child Psychopathology* (2nd ed., pp. 279–329). New York: Guilford.

Alessandri, S. M., & Lewis, M. (1993). Parental evaluation and its relation to shame and pride in young children. *Sex Roles, 29*, 335–343.

Alessandri, S. M., & Lewis, M. (1996a). Development of the self-conscious emotions in maltreated children. In M. Lewis & M. W. Sullivan (Eds.), *Emotional development in atypical children* (pp. 185–201). Mahwah, NJ: Erlbaum.

Alessandri, S. M., & Lewis, M. (1996b). Differences in pride and shame in maltreated and nonmaltreated preschoolers. *Child Development, 67*, 1857–1869.

Andrews, B. (1995). Bodily shame as a mediator between abusive experiences and depression. *Journal of Abnormal Psychology, 104*, 277–285.

Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: The Experience of Shame Scale. *British Journal of Clinical Psychology, 41*, 29–42.

Barber, B. K. (2002). Reintroducing parental psychological control. In B. K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 3–13). Washington, DC: American Psychological Association.

Barlow, D. H. (2000). Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. *American Psychologist, 55*, 1245–1263.

Barlow, D. H. (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd ed.). New York: Guilford.

Barrett, K. C. (1995). A functionalist approach to shame and guilt development. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 25–63). New York: Guilford.

Barrett, K. C. (1998a). A functionalist perspective to the development of emotions. In M. F. Mascolo & S. Griffin (Eds.), *What develops in emotional development?* (pp. 109–133). New York: Plenum.

Barrett, K. C. (1998b). The origins of guilt in early childhood. In J. Bybee (Ed.), *Guilt and children* (pp. 75–90). San Diego, CA: Academic Press.

Barrett, K. C. (2000). The development of the self-in-relationships. In R. S. L. Mills & S. Duck (Eds.), *The developmental psychology of personal relationships* (pp. 91–107). Chichester, UK: Wiley.

Barrett, K. C., & Campos, J. J. (1987). Perspectives on emotional development II: A functionalist approach to emotions. In J. Osofsky (Ed.), *Handbook of infant development* (pp. 555–578). New York: Wiley.

Barrett, K. C., Zahn-Waxler, C., & Cole, P. M. (1993). Avoiders vs. amenders: Implications for the investigation of guilt and shame during toddlerhood?. *Cognition and Emotion, 7*, 481–505.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147–178.

Belsky, J., Domitrovich, C., & Crnic, K. (1997). Temperament and parenting antecedents of individual differences in three-year-old boys' pride and shame reactions. *Child Development, 68*, 456–466.

Benedict, R. (1946). *The chrysanthemum and the sword: Patterns of Japanese culture*. Boston, MA: Houghton Mifflin.

Birnbaum, D. W., & Croll, W. L. (1984). The etiology of children's stereotypes about sex differences in emotionality. *Sex Roles, 10*, 677–691.

Bischof-Kohler, D. (1991). The development of empathy in infants. In M. E. Lamb & H. Keller (Eds.), *Infant development: Perspectives from German-speaking countries* (pp. 1–33). Hillsdale, NJ: Erlbaum.

Block, J. H. (1981). The child-rearing practices report (CRPR): A set of Q items for the description of parental socialization attitudes and values. Unpublished manuscript, University of California, Institute of Human Development, Berkeley, CA.

Bowlby, J. (1973). *Attachment and loss: Separation: Anxiety and anger* (Vol. 2). Harmondsworth, UK: Penguin Books.

Braungart-Rieker, J., Garwood, M. M., Powers, B. P., & Notaro, P. C. (1998). Infant affect and affect regulation during the still-face paradigm with mothers and fathers: The role of infant characteristics and parental sensitivity. *Develomental Psychology, 34*, 1428–1437.

Braungart-Rieker, J., Garwood, M. M., Powers, B. P., & Wang, X. (2001). Parental sensitivity, infant affect, and affect regulation: Predictors of later attachment. *Child Development, 72*, 252–270.

Bretherton, I., Fritz, J., Zahn-Waxler, C., & Ridgeway, D. (1986). Learning to talk about emotions: A functionalist perspective. *Child Development, 57*, 529–548.

Bugental, D. B., & Happaney, K. (2002). Parental attributions. In M. H. Bornstein (Ed.), *Handbook of parenting* (2nd ed., Vol. 3, pp. 509–535). Mahwah, NJ: Erlbaum.

Burks, V. S., Dodge, K. A., Price, J. M., & Laird, R. D. (1999a). Internal representational models of peers: Implications for the development of problematic behavior. *Developmental Psychology, 35*(3), 802–810.

Burks, V. S., Laird, R. D., Dodge, K. A., Pettit, G. S., & Bates, J. E. (1999b). Knowledge structures, social information processing, and children's aggressive behavior. *Social Development, 8*, 220–236.

Buss, A. H. (1980). *Self-consciousness and social anxiety*. San Francisco, CA: W.H. Freeman.

Campos, J. J., Frankel, C. B., & Camras, L. (2004). On the nature of emotion regulation. *Child Development, 75*, 377–394.

Campos, J. J., Thein, S., & Owen, D. (2004). A Darwinian legacy to understanding human infancy: Emotional expressions as behavior regulators. *Annals of the New York Academy of Sciences, 1000*, 1–26.

Cervantes, C. A., & Callanan, M. A. (1998). Labels and explanations in mother–child emotion talk: Age and gender differentiation. *Developmental Psychology, 34*, 88–98.

Chavira, D. A., Stein, M. B., Bailey, K., & Stein, M. T. (2004). Comorbidity of generalized social anxiety disorder and depression in a pediatric primary care sample. *Journal of Affective Disorders, 80*, 163–171.

Cheung, M. S.-P., Gilbert, P., & Irons, C. (2004). An exploration of shame, social rank and rumination in relation to depression. *Personality and Individual Differences, 36*, 1143–1153.

Chiang, T. M., Barrett, K. C., & Nunez, N. N. (2000). Maternal attributions of Taiwanese and American toddlers' misdeeds and accomplishments. *Journal of Cross-Cultural Psychology, 31*, 349–368.

Chorpita, B. F., & Barlow, D. H. (1998). The development of anxiety: The role of control in the early environment. *Psychological Bulletin, 124*, 3–21.

Cole, P. M., Bruschi, C. J., & Tamang, B. L. (2002). Cultural differences in children's emotional reactions to difficult situations. *Child Development, 73*, 983–996.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*, 87–127.

Creighton, M. R. (1990). Revisiting shame and guilt cultures: A forty-year pilgrimage. *Ethos, 18*, 279–307.

Davidson, R. J. (2004). What does the prefrontal cortex "do" in affect: perspectives on frontal EEG asymmetry research. *Biological Psychology, 67*, 219–233.

Davidson, R. J., Jackson, D. C., & Kalin, N. H. (2000). Emotion, plasticity, context, and regulation: Perspectives from affective neuroscience. *Psychological Bulletin, 126*, 890–909.

DiBiase, R., & Lewis, M. (1997). The relation between temperament and embarrassment. *Cognition and Emotion, 11*, 259–271.

Dickerson, S. S., Gruenewald, T. L., & Kemeny, M. E. (2004). When the social self is threatened: Shame, physiology, and health. *Journal of Personality*.

Dickerson, S. S., & Kemeny, M. E. (2004). Acute stressors and cortisol responses: A theoretical integration and synthesis of laboratory research. *Psychological Bulletin, 130*, 355–391.

Dickerson, S. S., Kemeny, M. E., Aziz, N., Kim, K. H., & Fahey, J. L. (2004). Immunological effects of induced shame and guilt. *Psychosomatic Medicine, 66*, 124–131.

Dienstbier, R. A. (1984). The role of emotion in moral socialization. In C. Izard, J. Kagan, & R. B. Zajonc (Eds.), *Emotions, cognitions, and behaviors* (pp. 484–513). New York: Cambridge University Press.

Dienstbier, R. A., Hellman, D., Lehnhoff, J., Hillman, J. H., & Volkenaar, M. C. (1975). An emotion-attribution approach to moral behavior: Interfacing cognitive and avoidance theories of moral development. *Psychological Review, 82*, 299–315.

Dodge, K. A., Bates, J. E., & Pettit, G. S. (1990). Mechanisms in the cycle of violence. *Science, 250*, 1678–1683.

Draghi-Lorenz, R., Reddy, V., & Costall, A. (2001). Rethinking the development of "nonbasic" emotions: A critical review of existing theories. *Developmental Review, 21*, 263–304.

Dunn, J., Brown, J. D., & Beardsall, L. (1991). Family talk about feeling states and children's later understanding of others' emotions. *Developmental Psychology, 27*, 448–455.

Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry, 9*, 241–273.

Eisenberg, N., Cumberland, A., Spinrad, T. L., Fabes, R. A., Shepard, S. A., Reiser, M., et al. (2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behavior. *Child Development, 72*, 1112–1134.

Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology* (5th ed., Vol. 3, pp. 701–778). New York: Wiley.

Eisenberg, N., Shepard, S. A., Fabes, R. A., Murphy, B. C., & Guthrie, I. K. (1998). Shyness and children's emotionality, regulation, and coping: Contemporaneous, longitudinal, and across context relations. *Child Development, 69*, 767–790.

Feiring, C., Taska, L., & Chen, K. (2002a). Trying to understand why horrible things happen: Attribution, shame, and symptom development following sexual abuse. *Child Maltreatment, 7*, 26–41.

Feiring, C., Taska, L., & Lewis, M. (1998). The role of shame and attributional style in children's and adolescents' adaptation to sexual abuse. *Child Maltreatment, 3*, 129–142.

Feiring, C., Taska, L., & Lewis, M. (2002b). Adjustment following sexual abuse discovery: The role of shame and attributional style. *Developmental Psychology, 38*, 79–92.

Ferguson, T. J., & Eyre, H. L. (2000). Engendering gender differences in shame and guilt: Stereotypes, socialization, and situational pressures. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives* (pp. 254–276). Cambridge, UK: Cambridge University Press.

Ferguson, T. J., Eyre, H. L., & Ashbaker, M. (2000a). Unwanted identities: A key variable in shame–anger links and gender differences in shame. *Sex Roles, 42*, 133–157.

Ferguson, T. J., & Stegge, H. (1995). Emotional states and traits in children: The case of guilt and shame. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 174–197). New York: Guilford.

Ferguson, T. J., Stegge, H., Eyre, H. L., Vollmer, R., & Ashbaker, M. (2000b). Context effects and the (mal)adaptive nature of guilt and shame in children. *Genetic, Social, and General Psychology Monographs, 126*, 319–345.

Ferguson, T. J., Stegge, H., Miller, E. R., & Olsen, M. E. (1999). Guilt, shame, and symptoms in children. *Developmental Psychology, 35*, 347–357.

Fischer, K. W., Shaver, P. R., & Carnochan, P. (1990). How emotions develop and how they organise development. *Cognition and Emotion, 4*, 81–127.

Fivush, R. (1989). Exploring sex differences in the emotional content of mother–child conversations about the past. *Sex Roles, 20*, 675–691.

Frick, P. J., Cornell, A. H., Bodin, S. D., Dane, H. E., Barry, C. T., & Loney, B. R. (2003). Callous-unemotional traits and developmental pathways to severe conduct problems. *Developmental Psychology, 39*, 246–260.

Frick, P. J., & Ellis, M. L. (1999). Callous-unemotional traits and subtypes of conduct disorder. *Clinical Child and Family Psychology Review, 2*, 149–168.

Fung, H. (1999). Becoming a moral child: The socialization of shame among young Chinese children. *Ethos, 27*, 180–209.

Fung, H., & Chen, E. C. H. (2001). Across time and beyond skin: Self and transgression in the everyday socialization of shame among Taiwanese preschool children. *Social Development, 10*, 420–437.

Gilbert, P., Allan, S., & Goss, K. (1996). Parental representations, shame, interpersonal problems, and vulnerability to psychopathology. *Clinical Psychology and Psychotherapy, 3*, 23–34.

Gilbert, P., & Miles, J. N. V. (2000). Sensitivity to social put-down: Its relationship to perceptions of social rank, shame, social anxiety, depression, anger and self-other blame. *Personality and Individual Differences, 29*, 757–774.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10*, 243–268.

Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion: How families communicate emotionally*. Mahwah, NJ: Erlbaum.

Greenberg, J. R., & Mitchell, S. A. (1983). *Object relations in psychoanalytic theory*. Cambridge, MA: Harvard University Press.

Greenspan, S. I. (1979). *Intelligence and adaptation*. New York: International Universities Press.

Gross, C. A., & Hansen, N. E. (2000). Clarifying the experience of shame: The role of attachment style, gender, and investment in relatedness. *Personality and Individual Differences, 28*, 897–907.

Gruenewald, T. L., Kemeny, M. E., Aziz, N., & Fahey, J. L. (in press). Acute threat to the social self: Shame, social self-esteem, and cortisol activity. *Psychosomatic Medicine*.

Grych, J. H. (1998). Children's appraisals of interparental conflict: Situational and contextual influences. *Journal of Family Psychology, 12*, 437–453.

Haley, D. W., & Stansbury, K. (2003). Infant stress and parent responsiveness: Regulation of physiology and behavior during still-face and reunion. *Child Development, 74*, 1534–1546.

Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford.

Hastings, P. D., Zahn-Waxler, C., Robinson, J., Usher, B., & Bridges, D. (2000). The development of concern for others in children with behavior problems. *Developmental Psychology, 36*, 531–546.

Henderlong, J., & Lepper, M. R. (2002). The effects of praise on children's intrinisic motivation: A review and synthesis. *Psychological Bulletin, 128*, 774–795.

Hoglund, C. L., & Nicholas, K. B. (1995). Shame, guilt, and anger in college students exposed to abusive family environments. *Journal of Family Violence, 10*, 141–157.

Jenkins, J. M., & Oatley, K. (2000). Psychopathology and short-term emotion: The balance of affects. *Journal of Child Psychology and Psychiatry, 41*, 463–472.

Joireman, J. (2004). Empathy and the self-absorption paradox II: Self-rumination and self-reflection as mediators between shame, guilt, and empathy. *Self and Identity, 3*, 225–238.

Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology, 35*, 835–847.

Kaufman, G. (1985). *Shame: The power of caring (rev. ed.)*. Rochester, VT: Schenkman Books.

Kaufman, G. (1989). *The psychology of shame: Theory and treatment of shame-based syndromes*. New York: Springer Publishing.

Kelley, S. A., Brownell, C. A., & Campbell, S. B. (2000). Mastery motivation and self-evaluative affect in toddlers: Longitudinal relations with maternal behavior. *Child Development, 71*, 1061–1071.

Killen, M. (1997). Culture, self, and development: Are cultural templates useful or stereotypic?. *Developmental Review, 17*, 239–249.

Kochanska, G. (1991). Socialization and temperament in the development of guilt and conscience. *Child Development, 62*, 1379–1392.

Kochanska, G., DeVet, K., Goldman, M., Murray, K., & Putnam, S. P. (1994). Maternal reports of conscience development and temperament in young children. *Child Development, 65*, 852–868.

Kochanska, G., Gross, J. N., Lin, M., & Nichols, K. E. (2002). Guilt in young children: Development, determinants, and relations with a broader system of standards. *Child Development, 73*, 461–482.

Lane, R. D. (2000). Neural correlates of conscious emotional experience. In R. D. Lane & L. Nadel (Eds.), *Cognitive neuroscience of emotion* (pp. 345–370). New York: Oxford University Press.

Lane, R. D., & Schwartz, G. E. (1987). Levels of emotional awareness: A cognitive-developmental theory and its application to psychopathology. *American Journal of Psychiatry, 144*, 133–143.

Leaper, C., Anderson, K. J., & Sanders, P. (1998). Moderators of gender effects on parents' talk to their children: A meta-analysis. *Developmental Psychology, 34*, 3–27.

Leary, M. R., Koch, E. J., & Hechenbleikner, N. R. (2001). Emotional responses to interpersonal rejection. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 145–166). New York: Oxford University Press.

Leen-Feldner, E. W., Zvolensky, M. J., Feldner, M. T., & Lejuez, C. W. (2004). Behavioral inhibition: Relation to negative emotion regulation and reactivity. *Personality and Individual Differences, 36*, 1235–1247.

Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities Press.

Lewis, H. B. (1986). The role of shame in depression. In M. Rutter, C. E. Izard, & P. B. Read (Eds.), *Depression in young people; developmental and clinical perspectives* (pp. 325–339). New York: Guilford.

Lewis, H. B. (Ed.). (1987). *The role of shame in symptom formation*. Hillsdale, NJ: Erlbaum.

Lewis, M. (1992). *Shame: The exposed self*. New York: Free Press.

Lewis, M. (1993). The development of anger and rage. In R. A. Glick & S. P. Roose (Eds.), *Rage, power, and aggression* (pp. 148–168). New Haven, CT: Yale University Press.

Lewis, M. (1998). Shame and stigma. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 126–140). New York: Oxford University Press.

Lewis, M. (2000). Self-conscious emotions: Embarrassment, pride, shame, and guilt. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 623–636). New York: Guilford.

Lewis, M., Alessandri, S. M., & Sullivan, M. W. (1990). Violation of expectancy, loss of control, and anger expressions in young infants. *Developmental Psychology, 26*, 745–751.

Lewis, M., Alessandri, S. M., & Sullivan, M. W. (1992). Differences in shame and pride as a function of children's gender and task difficulty. *Child Development, 63*, 630–638.

Lewis, M., & Brooks-Gunn, J. (1979). *Social cognition and the acquisition of self*. New York: Plenum.

Lewis, M., & Michalson, L. (1983). *Children's emotions and moods: Developmental theory and measurement*. New York: Plenum.

Lewis, M., & Ramsay, D. (2002). Cortisol response to embarrassment and shame. *Child Development, 73*, 1034–1045.

Lewis, M., & Ramsay, D. (2004). Infant emotional and cortisol responses to goal blockage. Manuscript under review.

Lewis, M., & Ramsay, D. S. (1997). Stress reactivity and self-recognition. *Child Development, 68*, 621–629.

Lewis, M., Sullivan, M. W., Stanger, C., & Weiss, M. (1989). Self development and self-conscious emotions. *Child Development, 60*, 146–156.

Loader, P. (1998). Such a shame – a consideration of shame and shaming mechanisms in families. *Child Abuse Review, 7*, 44–57.

Lopez, F. G., Gover, M. R., Leskela, J., Sauer, E. M., Schirmer, L., & Wyssmann, J. (1997). Attachment styles, shame, guilt, and collaborative problem-solving orientations. *Personal Relationships, 4*, 187–199.

Lutwak, N., & Ferrari, J. R. (1997a). Shame-related social anxiety: Replicating a link with various social interaction measures. *Anxiety, Stress, and Coping, 10*, 335–340.

Lutwak, N., & Ferrari, J. R. (1997b). Understanding shame in adults: Retrospective perceptions of parental-bonding during childhood. *Journal of Nervous and Mental Disease, 185*, 595–598.

Lyubomirsky, S., & Nolen-Hoeksema, S. (1995). Effects of self-focused rumination on negative thinking and interpersonal problem-solving. *Journal of Personality and Social Psychology, 69*, 176–190.

Malatesta, C. Z., Culver, C., Tesman, J. R., & Shepard, B. (1989). The development of emotion expression during the first two years of life. Monographs of the Society for Research in Child Development, 54(1–2, Serial No. 219).

Malatesta, C. Z., & Wilson, A. (1988). Emotion cognition interaction in personality development: A discrete emotions, functionalist analysis. *British Journal of Social Psychology, 27*, 91–112.

McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *The New England Journal of Medicine, 338*, 171–179.

Mills, R. S. L. (2003). Possible antecedents and developmental implications of shame in young girls. *Infant and Child Development, 12*, 329–349.

Mills, R. S. L., Nazar, J., & Farrell, H. M. (2002). Child and parent perceptions of hurtful messages. *Journal of Social and Personal Relationships, 19*, 723–746.

Moore, G. A., Cohn, J. F., & Campbell, S. B. (2001). Infant affective responses to mother's still face at 6 months differentially predict externalizing and internalizing behaviors at 18 months. *Developmental Psychology, 37*, 706–714.

Nathanson, D. L. (1987a). Shaming systems in couples, families, and institutions. In D. L. Nathanson (Ed.), *The many faces of shame* (pp. 246–270). New York: Guilford.

Nathanson, D. L. (1987b). A timetable for shame. In D. L. Nathanson (Ed.), *The many faces of shame* (pp. 1–63). New York: Guilford.

Nathanson, D. L. (1992). *Shame and pride: Affect, sex, and the birth of the self*. New York: W.W. Norton.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. P. (1992). Predictors and consequences of childhood depressive symptoms: A 5-year longitudinal study. *Journal of Abnormal Psychology, 101*, 405–422.

Patterson, G. R. (1982). *A Social Learning Approach: Coercive family process* (Vol. 3). Eugene, OR: Castalia.

Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist, 44*, 329–335.

Pipp-Siegel, S., Robinson, J. L., Bridges, D., & Bartholomew, S. (1997). Sources of individual differences in infant social cognition: Cognitive and affective aspects of self and other. In R. J. Sternberg & E. L. Grigorenko (Eds.), *Intelligence, heredity, and environment* (pp. 505–528). Cambridge, UK: Cambridge University Press.

Pomerantz, E. M., & Ruble, D. N. (1998). The role of maternal control in the development of sex differences in child self-evaluative factors. *Child Development, 69*, 458–478.

Pomerantz, E. M., & Rudolph, K. D. (2003). What ensues from emotional distress? Implications for competence estimation?. *Child Development, 74*, 329–345.

Price, J. M., & Glad, K. (2003). Hostile attributional tendencies in maltreated children. *Journal of Abnormal Child Psychology, 31*, 329–343.

Retzinger, S. M. (1991). *Violent emotions; shame and rage in marital quarrels*. Newbury Park, CA: Sage.

Rochat, P., Striano, T., & Blatt, L. (2002). Differential effects of happy, neutral, and sad still-faces on 2-, 4- and 6-month-old infants. *Infant and Child Development, 11*, 289–303.

Rothbart, M. K., & Bates, J. E. (1998). Temperament. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology* (5th ed., Vol. 3, pp. 105–176). Wiley: New York.

Rubin, K. H., & Burgess, K. B. (2001). Social withdrawal and anxiety. In M. W. Vasey & M. R. Dadds (Eds.), *The developmental psychopathology of anxiety* (pp. 407–434). New York: Oxford University Press.

Rubin, K. H., Burgess, K. B., & Hastings, P. D. (2002). Stability and social-behavioral consequences of toddlers' inhibited temperament and parenting behaviors. *Child Development, 73*, 483–495.

Ruble, D. N., & Dweck, C. S. (1995). Self-conceptions, person conceptions, and their development. Social development. In N. Eisenberg (Ed.). *Review of personality and social psychology* (Vol. 15, pp. 109–139). Thousand Oaks, CA: Sage.

Rudy, D., & Grusec, J. E. (2001). Correlates of authoritarian parenting in individualist and collectivist cultures and implications for understanding the transmission of values. *Journal of Cross Cultural Psychology, 32*, 202–212.

Saarni, C., Mumme, D. L., & Campos, J. J. (1998). Emotional development: Action, communication, and understanding. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology* (5th ed., Vol. 3, pp. 237–309). Wiley: New York.

Sanftner, J. L., Barlow, D. H., Marschall, D. E., & Tangney, J. P. (1995). The relation of shame and guilt to eating disorder symptomatology. *Journal of Social and Clinical Psychology, 14*, 315–324.

Scaramella, L. V., & Leve, L. D. (2004). Clarifying parent–child reciprocities during early childhood: The early childhood coercion model. *Clinical Child and Family Psychology Review, 7*, 89–107.

Scheff, T. J. (1995). Conflict in family systems: The role of shame. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 393–412). New York: Guilford.

Scheff, T. J., & Retzinger, S. M. (1991). *Emotions and violence: Shame and rage in destructive conflicts*. Lexington, MA: Lexington Books.

Schlenker, B. R., & Leary, M. R. (1982). Social anxiety and self-presentation: A conceptualization and model. *Psychological Bulletin, 92*, 641–669.

Schore, A. N. (1994). *Affect regulation and the origin of the self: The neurobiology of emotional development*. Hillsdale, NJ: Erlbaum.

Schore, A. N. (1996). The experience-dependent maturation of a regulatory system in the orbital prefrontal cortex and the origin of developmental psychopathology. *Development and Psychopathology, 8*, 59–87.

Schore, A. N. (1998). Early shame experiences and infant brain development. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 57–77). London: Oxford University Press.

Shaw, D. S., Gilliom, M., Ingoldsby, E. M., & Nagin, D. S. (2003). Trajectories leading to school-age conduct problems. *Developmental Psychology, 39*, 189–200.

Stack, D. M., & Arnold, S. L. (1998). Changes in mothers' touch and hand gestures influence infant behavior during face-to-face interchanges. *Infant Behavior and Development, 21*, 451–468.

Stack, D. M., & Muir, D. W. (1992). Adult tactile stimulation during face-to-face interactions modulates 5-month-olds' affect and attention. *Child Development, 63*, 1509–1525.

Strauman, T. J., Lemieux, A. M., & Coe, C. L. (1993). Self-discrepancy and natural killer cell activity: Immunological consequences of negative self-evaluation. *Journal of Personality and Social Psychology, 64*, 1042–1052.

Sullivan, M. W., & Lewis, M. (2003). Contextual determinants of anger and other negative expressions in young infants. *Developmental Psychology, 39*, 693–705.

Tangney, J. P. (1996). Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Research and Therapy, 34*, 741–754.

Tangney, J. P., Burggraf, S. A., & Wagner, P. E. (1995). Shame-proneness, guilt-proneness, and psychological symptoms. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 343–367). New York: Guilford.

Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York: Guilford.

Tangney, J. P., Wagner, P. E., Burggraf, S. A., Gramzow, R., & Fletcher, C. (1990). The test of self-conscious affect for children (TOSCA-C). Unpublished manuscript, George Mason University, Fairfax, VA.

Tangney, J. P., Wagner, P. E., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology, 103*, 469–478.

Tomkins, S. S. (1962). Affect, imagery, consciousness. *The positive affects* (Vol. 1). New York: Springer.

Tomkins, S. S. (1963). Affect, imagery, consciousness. *The negative affects* (Vol. 2). New York: Springer.

Tronick, E., Als, H., Adamson, L., Wise, S., & Brazelton, T. B. (1978). The infant's response to entrapment between contradictory messages in face-to-face interaction. *Journal of Child Psychiatry, 17*, 1–13.

Turner, J. E., & Cole, D. A. (1994). Developmental differences in cognitive diatheses in child depression. *Journal of Abnormal Child Psychology, 22*, 15–32.

Weinberg, M. K., & Tronick, E. Z. (1996). Infant affective reactions to the resumption of maternal interaction after the still-face. *Child Development, 67*, 905–914.

Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.

Wells, M., & Jones, R. (2000). Childhood parentification and shame-proneness: A preliminary study. *American Journal of Family Therapy, 28*, 19–27.

Wittchen, H.-U., Stein, M. B., & Kessler, R. C. (1999). Social fears and social phobia in a community sample of adolescents and young adults: Prevalence, risk factors and co-morbidity. *Psychological Medicine, 29*, 319–323.

Zahn-Waxler, C., Klimes-Dougan, B., & Slattery, M. J. (2000). Internalizing problems of childhood and adolescence: Prospects, pitfalls, and progress in understanding the development of anxiety and depression. *Development and Psychopathology, 12*, 443–466.

Zahn-Waxler, C., Radke-Yarrow, M., & Wagner, E. (1992). Development of concern for others. *Developmental Psychology, 28*, 126–136.