Stress and Coping in Childhood:
The Parents’ Role

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SYNOPSIS

Despite the growing literature on how parenting predicts children’s adjustment to potentially stressful events, little is known about the specific mechanisms through which these effects operate. This review identifies some possible paths of parental influence by specifying ways that parents may influence each step of the coping process—from exposure to the potentially stressful event to event appraisal to child coping. Current stress and coping research is reviewed from this perspective, and directions for future research are outlined.

INTRODUCTION

During the last 15 years researchers have made major strides in understanding how children cope with stress (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Wolchik & Sandler, 1997). Studies of major life stresses such as marital conflict, divorce, maternal depression, natural disasters, and chronic illness have provided significant insights into the range of child responses to such situations, as well as many of the moderating factors that influence children's responses to stress. Studies of children’s responses to more minor life events have been conducted as well (e.g., Band & Weisz, 1988; Causey & Dubow, 1992; Hardy, Power, & Jaedicke, 1993; Kliewer, 1991). These have helped identify strategies that children and adolescents use to cope with such situations, as well as the relation between coping and adjustment (see Compas et al., 2001; and Eisenberg, Fabes, & Guthrie, 1997; for reviews).

Across studies of both major and minor stressors, a number of resources (i.e., protective factors) have been identified that moderate the effects of exposure to potentially stressful events (Haggerty, Sherrod, Garmezy, & Rutter, 1996; Hetherington & Blechman, 1996). These include child characteristics (e.g., self-esteem, internal locus of control, intelligence, and temperament) as well as external resources (e.g., social class, neighborhood safety, social support, and parental support). One of the most important re-
sources that influences children’s responses to stress—especially for young children—is the quality of the parent–child relationship. Because children are often exposed to potentially stressful events in the presence of their parents (or with their parents nearby), and because parents are often responsible for helping their children cope in these situations, it is not surprising that parents play a major role in this regard.

Numerous studies examining children’s responses to stress (especially major life stresses such as marital conflict, divorce, and chronic illness) have identified a number of parenting variables that predict positive child adjustment in such situations including parental warmth, responsiveness, consistency, and authoritative parenting styles. Children who show the most problematic adjustment, in contrast, are more likely to have parents who are rejecting, ignoring, inconsistent, or punishing (see chapters in Bornstein, 2002; Wolchik & Sandler, 1997, for reviews).

Despite the growing literature demonstrating that parenting predicts children’s adjustment to stress, little is known about the specific mechanisms through which these effects operate. That is, what exactly do warm, supportive, consistent parents do that help their children cope with stress, and how do these behaviors impact children’s coping patterns? The purpose of this review is to consider some of the processes through which children cope with stress and to identify some of the possible ways that parents may impact these processes.

**PARENTAL INFLUENCES ON CHILDREN’S COPING: SPECIFYING THE PATHWAYS**

Although many theories have been offered to explain how children and adults cope with stress, most current theories are “process models.” Rather than trying to identify events in the environment that are stressful (i.e., “stressors”), or trying to identify behavioral or physiological indicators of stress (e.g., ANS responses), process theories see stress as reflecting an interaction among environmental events, appraisal, and coping processes (e.g., Eisenberg et al., 1997; Lazarus & Folkman, 1984; McCubbin & Patterson, 1983). In addition, most process theories identify resources that moderate individuals’ responses to stress. In the approach taken here, parents are considered as resources who influence children’s responses.

Figure 1 summarizes the major components of contemporary theories of stress and coping and provides the framework for this review. As shown in the figure, children are exposed to “potentially stressful events,” and, if they appraise them as stressful, they may or may not engage in some kind of coping strategy. Parents can influence and are influenced at each stage of
the process, and it is these paths of influence that are considered in the following pages. Note that most of the arrows in the figure are bidirectional, in that influence can operate in both directions for most of the processes involved. In the sections that follow, I briefly review for each component in Figure 1 (i.e., potentially stressful events, appraisal, and coping) the recent literature on children’s stress and coping. At the same time, I review relevant research on how parents play a role at each stage of the stress and coping process, with an emphasis on understanding specific mechanisms through which parents may exert their effects. In reviewing research on the parents’ role, I present a preliminary taxonomy of parenting practices that both summarizes the current state of our knowledge as well as provides directions for future research.

**POTENTIALLY STRESSFUL EVENTS**

It is well documented that children exposed to certain potentially stressful life events (such as marital conflict, death of a loved one, and school failure) are at greater risk for adjustment problems than children who have not experienced these events (see Wolchik & Sandler, 1997, for review). Although the relation between stress and adjustment is not perfect (it is mod-
erated by a number of factors including the child’s coping behaviors, and so on), the probability of adjustment difficulties usually increases as a function of the level of event exposure (e.g., Attar, Guerra, & Tolan, 1994; Capaldi & Patterson, 1991). Therefore, a major way that parents influence how their children cope with stress is by influencing the specific events that their children are exposed to or by influencing how children are exposed to these events, or both.

Parents, of course, often have limited control over the events that their children experience. Parental ability likely varies as a function of child age, family size, age of siblings, marital quality, parental work schedules, family physical well-being, media usage, financial difficulties, peer networks, neighborhood safety, school size, school quality, quality of after-school care, and numerous community factors. Parents also may vary in the degree to which they believe that such protection is important or even desirable. Although there has been little research on the correlates of parental control over children’s exposure potentially stressful events, one would expect to find the highest levels of control in small, healthy, financially secure families of young children living in safe, stable neighborhoods, where the children attend high quality schools, and the parents’ availability is not jeopardized by occupational or other factors. As demonstrated in numerous studies, children from families with such high levels of social, educational, and financial capital usually show the highest levels of academic success and psychological and behavioral adjustment (e.g., Dorsey & Forehand, 2003; Parcel & Dufur, 2001; but possibly not in all areas—see Luthar & Becker, 2002). Parental influence on child exposure likely decreases as children get older and spend less time with their parents, and in situations where parents have difficulty preventing exposure due to numerous factors beyond their control (e.g., family financial hardship, neighborhood crime, unsafe schools, or physical illness).

So in what areas do parents exercise protection? The literature suggests a variety including: family difficulties or “secrets” (such as financial, marital, or job difficulties; family mental illness; and family drug and alcohol abuse); antisocial peers; dangerous adults (e.g., abusive teachers, pedophiles); dangerous objects (e.g., matches, knives, guns); media sex and violence (e.g., television, movies, CDs, the Internet); dangerous places (e.g., busy streets, high crime neighborhoods); disease (e.g., chicken pox, AIDS); school failure; and even “dangerous” ideas (e.g., certain political views or religious practices; e.g., Brodsky & DeViet, 2000; Crouter & Head, 2002; Griffore & Phenice, 1996; Lehman & Koerner, 2002; Mason, Cauce, Gonzales, & Hiraga, 1996; Power & Manire, 1992; Power, Olvera, & Hays, 2002).

Despite the importance of the parent’s protective role, it is surprising (with the exception of work on television viewing—see the following para-
graphs) that so little research has been devoted to the positive effects of parental protection—especially parental influences over children’s exposure to potentially stressful events. The studies that come closest are investigations of parental “monitoring.” In these studies, high levels of parental monitoring are negatively associated with a number of adolescent problem behaviors including conduct problems, delinquency, substance use, and early sexual activity (see Crouter & Head, 2002, for a recent review). Although such findings are consistent with the idea that parental protective ness facilitates positive outcomes, Crouter and Head (2002) pointed out that the majority of these studies do not measure parental behavior at all, but assess parental knowledge of child behavior outside of the home. That is, they assess what parents know about their children’s behavior, but not how they know it.

This is potentially problematic for our purposes, because Stattin and Kerr (2000) showed that the strongest correlate of parental knowledge of children’s activities was not parental rules, control practices, or the solicitation of information, but children’s self-disclosure. That is, parents with the most knowledge (or highest level of “monitoring”) were those whose children kept them informed of their actions. The demonstrated relation between parental “monitoring” and adolescent behavior, therefore, may not reflect the impact of parental monitoring practices at all, but may reflect the tendency of antisocial adolescents to engage in low levels of self-disclosure.

Another limitation of these studies is that they do not directly assess what parents actually do with the knowledge that they derive to protect children from further exposure, nor do they measure what parents are trying to protect their children from. In none of the studies that directly assessed parental monitoring behaviors did the researchers ask parents open-ended questions about how they kept track of their adolescent’s whereabouts or activities (e.g., Chilcoat, Anthony, & Dishion, 1995; Kerr, Stattin, & Trost, 1999; Ladd & Golter, 1988; Manning, 1990; Mott, Crowe, Richardson, & Flay, 1999; Otto & Atkinson, 1997; Pagani, Boulerice, Vitaro, & Tremblay, 1999; Stattin & Kerr, 2000). Instead, all studies involved having parents respond on Likert scales to a series of experimenter-generated parental rules and behaviors. Therefore, we do not have information on the wide range of techniques that parents actually use in attempting to protect their children and adolescents from potentially stressful situations.

A review of the experimenter-generated items in these studies provides some clues as to some of the more common parental monitoring techniques. As provided in Table 1, these include: (1) arranging to be physically present during adolescent activities (parental availability); (2) participating in activities with the adolescent; (3) ensuring that another adult is pres-
ent; (4) checking in on adolescent behavior (e.g., through telephoning or dropping by); (5) soliciting information from adolescents, their friends, their friends’ parents, or their teachers; and (6) setting and enforcing rules about adolescent behavior outside of the home. The rules and limits that researchers usually focused on were: (1) parental monitoring of adolescent location, activities, or people present; or (2) setting limits on when the adolescent could be unsupervised outside of the home (e.g., after school, dinner time, evening curfews). Other rules focused on television viewing, homework completion, and how money was spent. The nature of the rules varied from: (1) those where parents required that adolescents inform them of their location, activities, and so forth to (2) those requiring parental permission to engage in certain activities to (3) those involving parental requirements that certain activities did or did not occur. Because most studies combined various monitoring measures into a single monitoring construct, we have few data on how variations in the nature of parental monitoring strategies are associated with child and adolescent outcomes.

Besides parental monitoring and follow up, parents can engage in a variety of other strategies to protect their children from potentially stressful events (see Table 1). These include withholding information (e.g., not talking about financial difficulties in front of the children), promoting positive alternatives (e.g., setting up play dates so that the child makes friends with

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**TABLE 1**

Parental Protective Strategies

<table>
<thead>
<tr>
<th>I. Direct prevention</th>
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<tbody>
<tr>
<td>a. Restrict access (e.g., do not have television in house, hide dangerous objects from child, move dangerous objects out of reach)</td>
</tr>
<tr>
<td>b. Technological aides (e.g., V-chip, cabinet locks, outlet plugs, Internet filters, seat belts)</td>
</tr>
<tr>
<td>c. Create predictable environment (e.g., clear family roles, family routines)</td>
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<table>
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<tr>
<th>II. Rule setting and enforcement (e.g., location, activities, people present, time of day)</th>
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<tbody>
<tr>
<td>a. Prohibitions</td>
</tr>
<tr>
<td>b. Require getting permission</td>
</tr>
<tr>
<td>c. Require keeping parents informed</td>
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</tbody>
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<tr>
<th>IV. Supervision or monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Participating in activities (parent or other adult)</td>
</tr>
<tr>
<td>b. Checking in on child</td>
</tr>
<tr>
<td>c. Being available (parent or other adult)</td>
</tr>
<tr>
<td>d. Soliciting information (from child, child’s friends, friend’s parents, or teachers)</td>
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</table>

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<tr>
<th>V. Promote positive alternatives (e.g., play dates with prosocial peers, youth organizations, extracurricular activities, or sports)</th>
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desirable peers and avoids undesirable ones), direct prevention (e.g., restrict access, technological aides, or setting up a consistent, predictable home environment through clear family roles and routines). Numerous studies have found a positive relation between family organization and routines and children’s psychosocial adjustment (e.g., Fiese et al., 2002; Johnson, Cowan, & Cowan, 1999; Taylor, 1996).

Probably the most extensive literature on strategies to prevent exposure to certain potentially stressful situations is in area of parents and television. As documented in a number of studies (e.g., Ridley-Johnson, Surdy, & O’Laughlin, 1991; Young, 2003), many parents are concerned about the effects of the media on their children—especially the effects of advertising, and sexual and violent programming. Such parents may engage in a range of strategies to protect their children from these influences including: (1) setting and enforcing rules about media use; (2) supervising and monitoring media use; (3) employing protective technologies such as parental locks, V-chip technology, and Internet filters; (4) directly restricting access to the technology (either by not purchasing the technology or by keeping equipment in a location off-limits to the child); and (5) promoting positive alternatives (e.g., providing access to positive media content or encouraging outdoor play). Despite the efforts of a significant minority of parents in this regard, most parents do very little to control their children’s media access (Dorr, Rabin, & Irlen, 2002). However, for those parents who do, their children show overall lower levels of media usage (e.g., Griffore & Phenice, 1996; Siegel & Hanson, 1992; Truglio, Murphy, Oppenheimer, Huston, & Wright, 1996).

Another area of concern to some parents is the quality of the child’s peer relationships (Aukrust, Edwards, Kumru, Knoche, & Kim, 2003; Tilton-Weaver & Galambos, 2003). Such parents often want to protect their children from the effects of peer rejection or from the consequences of associating with antisocial peers. One parental strategy is to encourage the development of relationships with prosocial peers. Several studies of preschool children, for example, show that parents who provide their children with opportunities for peer interaction outside of school have children who have a greater number of frequent playmates at school and experience lower levels of peer rejection (Ladd & Golter, 1988; Ladd & Hart, 1992).

In the area of safety, researchers have identified a number of proactive strategies that parents use to reduce the likelihood of childhood falls, poisonings, burns, electrocution, drowning, and car-related injuries (Glik, Greaves, Kronenfeld, & Jackson, 1993; Golfin & Palti, 1991). These include strategies such as storing items safely and out of reach; plugging electric outlets; putting safety gates on the top of stairs; installing cabinet locks; using car seats; and so on. Power and colleagues (2002) found that mothers of
young children who used a greater number of such proactive strategies had children who were less likely to break household safety rules.

Finally, although much has been written on the negative consequences that may ensue when parents disclose personal or family difficulties to their children (e.g., Bowen, 1978; Minuchin, 1974), there is little empirical research on this issue. The one exception is research on HIV or AIDS. In these studies, researchers have compared the psychological adjustment of children whose mothers have or have not disclosed their medical status to their children. The results of these studies are mixed, with several showing positive relations between maternal disclosure and child psychological symptoms (Lee, Lester, & Rotheram-Borus, 2002; Rotheram-Borus, Draimin, Reid, & Murphy, 1997; Shaffer et al., 2001), one showing a negative relation (Murphy, Steers, & Stritto, 2001), and several showing no significant associations (Armistead, Klein, Forehand, & Wierson, 1997; Armistead, Tannenbaum, Forehand, Morse, & Morse, 2001). Kirshenbaum and Nevid (2002) suggested that the nature of the disclosure may be the most important variable—mothers who told their children that they were sick or ill had children who showed more behavior problems than mothers who directly told their children that they had HIV or AIDS. Children whose mothers told them to keep the information a secret had more behavior problems as well.

Only one empirical study could be found that examined the child adjustment correlates of disclosure in areas other than HIV or AIDS. In a study of the daughters of recently divorced mothers (Koerner, Wallace, Lehman, & Raymond, 2002; Lehman & Koerner, 2002), mothers’ disclosure of financial concerns, negativity toward the ex-husband, job stress, and personal concerns all were negatively associated with child adjustment. Moreover, for financial concerns, the relation between familial financial hardship and adolescent adjustment was mediated through maternal disclosure. Therefore, mothers who experienced significant financial hardships, but did not share this information with their daughters, had daughters who were just as well adjusted as adolescents in families with no financial hardship.

Parental protection, of course, is not always a good thing. To learn effective coping strategies, children must learn to adapt to difficult situations. Although it is hard to imagine a childhood without stress, some children may have limited experience with certain kinds of stressors due to “overprotective” parenting. The overprotective parent, first described by Levy (1931), is “highly supervising, has difficulties with separation from the child, discourages independent behaviors, and is highly controlling” (Thomasgard & Metz, 1999, p. 348). Overprotective parents, therefore, frequently engage in the practices listed in Table 1. Although there is a strong
consensus among theoreticians and practitioners that such parenting leads to immature, dependent behavior in children (e.g., Anderson & Coyne, 1991; Parker, 1983; Sargent, 1983; Thomasgard & Metz, 1993), empirical support for this connection is limited. Most studies in this area are retrospective investigations of adults showing positive associations between recollections of being reared by overprotective parents and current adjustment problems (e.g., Llyod & Miller, 1997; Reti et al., 2002). Although a few studies, mostly conducted on pediatric populations, have employed parent or child reports of current overprotection, the use of observational methods is rare, and the measurement of overprotection relies on the subjective judgments of the observers (see Holmbeck et al., 2002, for a review).

Although these studies provide a good start for beginning to understand the correlates and possible consequences of overprotective parenting, they provide few guidelines for differentiating between appropriate and overprotective patterns of parent behavior. Few normative data are currently available on the use of various parental protective practices at various child ages, making it difficult to determine what is appropriate or overprotective at a given age or for a particular child.

Summary and Developmental Considerations

Because coping, like any skill, undoubtedly improves with practice, it is likely that children need to be exposed to manageable, age-appropriate stressors so that they can learn (with parental support) how to cope. On the other hand, sensitive parents probably do what they can to protect their child from stressors that are far beyond the child’s ability to manage, because such situations can be distressing, and even traumatic, for the child. Because children’s coping strategies in such situations are ineffective, children may become so discouraged that they may avoid trying to cope with similar situations in the future. As children mature and develop the ability to cope with increasingly challenging situations, effective parents probably decrease their level of protectiveness and assist their children in coping with situations (or even aspects of situations) that they had protected them from in the past. Parents who do not adjust their practices to the emerging coping abilities of the developing child run the risk of “overprotecting” their child and undermining the development of independent coping skills.

So how might the nature of protective practices change in response to the child’s developing coping abilities? The literature previously reviewed provides some clues. Studies of infants and toddlers (e.g., Gralinski & Kopp, 1993; Power & Parke, 1986) suggest that health and safety are probably the primary focus of parental protection during the
first 3 years of life—parents babyproof their homes to protect the increasingly mobile toddler from accidental injury; they bring their children in for check-ups and immunizations to keep them healthy; and they closely monitor their location and activities to keep them from getting hurt. During the early childhood years, as children become proficient at language and begin to spend more time playing with peers (either at home, at the neighbors, or at child care), parents probably focus greater energy on protecting their children from peer conflict (Parke & Bhavnagri, 1989; Power & Manire, 1992), from aspects of the media (Truglio et al., 1996), and from a range of sensitive “adult” topics that are best not spoken about in front of young children (e.g., problems at work, marital difficulties). In general, one would expect that the overall frequency of protective behaviors in the five major categories in Table 1 (direct prevention, withhold information, rule setting, supervision or monitoring, and promote positive alternatives) would become less common with increasing child age. Moreover, within each category, one would expect decreases in the overall level of parental involvement and control. (Note: Within categories, the protective strategies in Table 1 are listed by decreasing levels of parental involvement and control.) Therefore, in the supervision or monitoring area, one would expect to find with increasing child age a decrease in strategies such as participating in activities and checking in on the child, and an increase in being available and soliciting information.

As children enter elementary school and spend less time under direct parental supervision, parental attempts to protect their children from “dangerous adults” (e.g., abusive teachers, pedophiles) probably come to the forefront, as would attempts to as protect them from dangerous places (e.g., busy streets, high crime neighborhoods) and antisocial peers. Moreover, the elementary school child’s increasing curiosity about interpersonal, societal, and cultural issues may force parents to make decisions about how much information they want to provide their children about topics such as family secrets, sex, death, crime, religion, politics, war, and so on. As children enter adolescence, concerns about antisocial peers probably increase (Mason et al., 1996), as do concerns about substance use, sexual behavior, and physical safety (Power & Shanks, 1989).

Child protection is an evolving, bidirectional process between parents and their children. As children develop new knowledge, interests, and abilities, sensitive parents probably adjust their protective practices to encourage the development of independent coping. As most parents know all too well, many “protective” interactions do not involve execution of a well-thought-out parenting plan—instead they may be “on the fly” parental reactions to a child’s innocent questions about topics such as a traffic accident (e.g., “Did he die?”), a purchase (e.g., “Why don’t you use your red
credit card anymore?), or sexual behavior (e.g., “Why do only married women have babies?”). Such questions force parents to make at-the-moment decisions about how much and what kind of information they want to share with their child about sensitive and potentially stressful topics. Similarly, adolescents constantly force their parents to revise their rules and protective practices as they confront their parents with new and more complex situations (e.g., the adolescent who is invited to a friend’s cabin for the weekend or wants to drive her friends to a rock concert 2 hr away). Parental protection should not be viewed as a unidirectional process from parents to children, but as a negotiated set of interactions that may facilitate or interfere with the child’s developing coping abilities. One might view parents’ protective practices as part of a larger scaffolding process (Wood, Bruner, & Ross, 1976) where parents attempt to regulate exposure to those aspects of potentially stressful situations that they feel the child can handle and learn from. The specific parenting practices that serve as the “scaffold” are considered in the next two sections.

APPRAISAL

Once a child has been exposed to a potentially stressful event, his or her responses depend, in part, by how it is appraised (see Figure 1). Most contemporary theories emphasize the importance of appraisal in the coping process (e.g., Eisenberg et al., 1997; Lazarus & Folkman, 1984; McCubbin & Patterson, 1983). That is, children’s short- and long-term adaptation to potentially stressful events is not simply a function of the nature of the events experienced, but of the meaning that children derive from these events. For example, children who view a poor grade on a test as a challenge will respond very differently from children who are convinced that such grades are evidence of a lack of ability.

Although appraisal variables are at the center of many theories of child psychopathology (e.g., Bogels & Zigterman, 2000; Leitenberg, Yost, & Carroll-Wilson, 1986; Pinto & Whisman, 1996; Seligman et al., 1984; Williamson, Muller, Reas, & Thaw, 1999), limited information is available on individual differences in healthy children’s appraisal of naturally occurring, potentially stressful events. Studies of adults have identified a number of underlying appraisal dimensions ranging from 2 dimensions to 10 (see Hasan & Power, 2004, for a review of the child and adult studies).

In a descriptive study of 9- to 12-year-olds, Hasan and Power (2004) had children answer a number of appraisal questions about the most stressful event that they had experienced in the past 5 months. Six appraisal dimensions were identified through exploratory factor analysis (see Figure 1).
These corresponded to the major dimensions found in studies of adults: degree of threat, significance, self-blame, external blame, gain, and predictability. Further work suggested that an additional dimension—manageability—should be added as well. In the sections that follow, the literature relevant to each of these appraisal dimensions will be reviewed to address two issues: (1) the relations between child appraisal and child adjustment, and (2) the various ways that parents might influence the nature of children's appraisals.

Threat and Significance

According to Lazarus (1991), the three components of primary appraisal in potentially stressful situations are goal relevance, goal congruence or incongruence, and type of ego-involvement. Stressful events are those that are goal relevant (i.e., significant), goal incongruent, and involve some kind of threat, harm, or loss to the self or others. The threat can involve physical (e.g., injury), psychological (e.g., self-esteem), or social harm (e.g., rejection). Sandler and colleagues, for example, have demonstrated that the degree to which children appraise potentially stressful events as threatening to the self or others (i.e., threat appraisals) is negatively associated with child adjustment (e.g., Lengua, Sandler, West, Wolchik, & Curan, 1999; Sheets, Sandler, & West, 1996; Weyer & Sandler, 1998).

Kliewer, Sandler, and Wolchik (1994) suggested three paths through which parents may influence their children’s threat appraisals—through modeling, through coaching, and through contextual paths. Modeling refers to influencing appraisal through example, coaching refers to providing direct instructions on how to appraise an event, and contextual effects refer to the various ways that parents are “providers and architects of the family context in which coping behaviors are learned and enacted” (pp. 277–278). An elaboration of these pathways is presented in Table 2.

As can be seen in Table 2, parental modeling can involve the modeling of emotions or the direct modeling of event appraisals. Moreover, modeling can occur in the context of an event simultaneously experienced by both parent and child or can involve the child enacting parent behavior witnessed in the past. For example, the way a child appraises the “threat” of an approaching dog can be influenced by the model of parental behavior in this situation (e.g., the child is influenced by the parent’s fear) or children can be influenced by the model that the parent has offered in previous situations (e.g., the way the child responds to a dog when the parents are not present may be influenced by their witnessing parental reactions to dogs in the past). Kliewer and associates (1994) pointed out that the research on social referencing and emotional contagion supports the role of
parental modeling in threat appraisal. In social referencing studies (e.g., Feinman, 1992), for example, researchers have demonstrated experimentally that children’s emotional responses to ambiguous events can be influenced by the emotion displayed by the parent. In research on emotional contagion (e.g., Hatfield, Cacioppo, & Rapson, 1993), emotional signals by one person can elicit similar emotions in another.

Parents can model emotional responses in much more subtle ways as well. This is illustrated in studies of children undergoing painful medical procedures. In the typical study, parent and child behavior is observed before and during a potentially stressful medical procedure (e.g., injection, blood draw, spinal tap). When examining the results across numerous studies, it is clear that there are many more parenting behaviors related positively to children’s distress than parenting behaviors showing negative relations (as described in the following coping section, parental distraction is the only consistent negative predictor of child distress in these studies). Examples of parental behaviors positively associated with children’s distress include parental agitation, criticism, vague commands, ignoring, and physical restraint. Although one might expect that such “inappropriate” behaviors would be associated with greater child distress, a number of other parental behaviors show positive correlations as well. These include more “positive” behaviors such as reassurance, bargaining, apologizing, explanations, information giving, and empathy (see Blount et al., 1989; Bush & Cockrell, 1987; Bush, Melamed, Sheras, & Greenbaum, 1986; Dahlquist et al., 2001; Dahlquist, Power, & Carlson, 1995; Dahlquist,

TABLE 2

Parental Strategies Influencing Children’s Appraisal (i.e., Threat, Significance, Blame, Manageability, Gain, and Predictability)

| I. Modeling     |   |
| a. Emotions    |   |
| b. Verbal appraisals |   |
| II. Coaching   |   |
| a. Appraise for child |   |
| b. Guide appraisal |   |
| i. Help attend to relevant stimuli |   |
| ii. Help seek out appropriate information |   |
| iii. Encourage logical thinking and analysis |   |
| iv. Help understand cause and effect |   |
| v. Encourage perspective taking |   |
| III. Contextual |   |
| a. Praise or accept |   |
| b. Scold, criticize, or reject |   |

Therefore, with the exception of distraction, almost anything that parents do before or during such a procedure is positively associated with child distress. Dahlquist et al. (1995) further supported this conclusion by showing that the most powerful parental predictor of child distress was not the occurrence of any particular type of parental behavior, but the overall rate of parental behavior during the session (i.e., the average number of parenting behaviors per 15-s interval). Similarly, in a laboratory study where mothers of preschoolers were given an opportunity to prepare their children for a physical examination by an unfamiliar examiner (Kuczynski, 1987), maternal monitoring of emotions, affection, affective stimulation, and cognitive structuring before the examiner arrived were all positively correlated with children’s later distress; only toy play (possibly a distracter) showed a negative correlation.

Because preprocedure parental ratings of anxiety have been shown to be significant predictors of child distress (e.g., Bush et al., 1986; Dahlquist et al., 1994), one possibility is that anxious parents engage in higher levels of interaction with their children before such procedures to help “prepare” the child for the upcoming procedure, thereby subtly communicating their anxiety that something very negative is about to happen. Just as toddlers in social referencing studies use parental cues to help interpret emotionally ambiguous events (e.g., Feinman, 1992), children in medical settings may interpret high levels of preprocedure parental activity as a cue that the upcoming procedure is something to be anxious about. Thus, high levels of parental activity may lead to negative appraisals on the part of the child. This interpretation may account for the counterintuitive finding that parental reassurance is positively (not negatively) associated with children’s distress, both in correlational (Bush et al., 1986; Dahlquist et al., 1994, 1995) and experimental (Manimal, Blount, & Cohen, 2000) studies.

As shown in Table 2, parents can influence their children’s threat appraisals not only by modeling emotions, but by verbalizing their appraisal of potentially stressful events. A child, for example, may learn to fear dogs because the parent says something like “Big dogs scare me,” even in a situation where no dog is present. Finally, parents may influence their children’s threat appraisals through coaching or contextual pathways (see Table 2). However, because research on threat appraisals to date has yet to examine these pathways, they will be considered in sections on the other following appraisal dimensions.
Self-Blame

It is well documented that children who blame themselves for the occurrence of stressful life events beyond their control are at greater risk for maladjustment than are children who do not engage in self-blame. This has been found in such diverse areas as marital conflict (Grych & Fincham, 1993; Jouriles, Spiller, Stephens, McDonald, & Swank, 2000), divorce (Mazur, Wolchik, Virdin, Sandler, & West, 1999), and sexual abuse (Spaccarelli, 1994). Moreover, children showing a “depressive” attributional style characterized by internal, stable, and global attributions for negative outcomes are at greater risk to develop depressive symptoms than those who make external, unstable, specific attributions in such situations (e.g., Jaenicke et al., 1987; Nolen-Hoeksema, Gergus, & Seligman, 1992). However, only attributions that are internal and stable are associated with negative outcomes (e.g., attributing failure to lack of ability); children showing internal, unstable attributions (e.g., attributing failure to lack of effort) persist and usually are successful in the face of failure (Dweck, 1991).

So how do parents influence attributions of blame? As with threat appraisals, one pathway is through modeling. That is, children who blame themselves for negative events beyond their control may have developed this tendency through observing their parents make similar attributions. Evidence for modeling, however, is weak. Although maternal and child depressive attributional styles were positively correlated in one study (Seligman et al., 1984), there was no significant correlation in three others (Garber & Flynn, 2001; Kaslow, Rehm, Pollack, & Siegel, 1988; Turk & Bry, 1992). Moreover, in none of these studies were the father – child correlations significant.

Parents may more directly influence their children’s attributions of blame through coaching and contextual pathways in Table 2. Specifically, children who develop self-blame attributions may have parents who simply appraise events for the child (e.g., “That’s O.K., honey. Some kids just aren’t good in math.”) or are overly critical across a range of situations leading to a general sense of self-blame (e.g., “You can’t do anything right.”). Several studies provide support for these hypotheses. Specifically, children’s depressive attributional style was correlated positively with children’s perceptions of “negative parenting” (e.g., criticism, threats, commands, and psychological control) and parent–child conflict, and correlated negatively with children’s perceptions of “positive” parenting (e.g., acceptance, giving comfort, spending time together, allowing independence) and family social support (Garber & Flynn, 2001; Jaenicke et al.,
In one study (Garber & Flynn, 2001), both child and maternal reports of parenting were correlated with children’s attributitional style, and in another (Jaenicke et al., 1987), observed maternal criticism was positively correlated with children’s depressive attributional style. Gibb and colleagues (see Gibb, 2002, for review) have shown that child maltreatment is associated with depressive attributional style as well.

Unlike most studies that have focused on depressive attributional style, Pomerantz and Ruble (1998) examined parenting correlates of children’s self-blame in the academic context. Mothers of 6- to 11-year-olds completed daily checklists of controlling and autonomy granting childrearing practices in five areas (helping, monitoring, decision making, praising, and disciplining). Children’s self-blame for failure was assessed through the attributions children made for failure in an experimental task and through their self-reports of attributions for poor performance in school. In both the helping and monitoring domains, maternal autonomy granting was negatively associated with children’s self-blame.

**External Blame**

Children also differ in the degree to which they blame others for the negative events that occur in their lives. Several studies, for example, show that aggressive children are more likely than nonaggressive children to attribute hostile motives to others in ambiguous social situations (e.g., Dodge, 1985). This *hostile attributional bias* appears to play a causal role in children’s aggressive behavior. So how might parents contribute to the development of such a bias? As was the case for depressive attributional style, the evidence for modeling is weak. Although mothers of aggressive boys are more likely than mothers of nonaggressive boys to show a hostile attributional bias in judging child behavior (Bickett, Milich, & Brown, 1996; Strassberg, 1995), only one study could be located in which the correlation between mothers’ and children’s bias was examined, and the correlation was nonsignificant (MacKinnon-Lewis, Lamb, Arbuckle, Baradaran, & Volling, 1992).

There is greater evidence for contextual pathways. One might expect that children of overly punitive parents might develop a hostile attributional “bias,” in that, for these children, parental intent is hostile in many situations. In general, this prediction has been confirmed. Children’s reports of parental rejection and control (Cassidy, Kirsh, Scolton, & Parke, 1996; Gomez & Gomez, 2000) and parental and agency reports of physical abuse (Dodge, Pettit, Bates, & Valente, 1995; Downey & Walker, 1989) are positively associated with a hostile attributional bias in children.
Although studies of external blame outside of aggressive situations could not be found, it is likely that the degree to which children blame others for the occurrence of other negative events (e.g., failure on an “unfair” exam, getting into trouble with school authorities, conflicts with other adults) might be influenced by parents as well. Parents could do this through modeling, by appraising the situation for the child (e.g., “Your teacher never has been fair to you.”), or by guiding appraisal in some way. This final possibility is likely a scaffolding process (see Table 2) where parents may: (1) help the child attend to relevant stimuli (e.g., “Now think about it. Even on that science project where you won third place your teacher gave you a bad grade.”); (2) help the child to seek out appropriate information (e.g., “Let’s find out what kinds of grades other kids got on their projects.”); (3) encourage logical thinking and analysis (e.g., “But if it were your fault, why did everybody else in the class get a bad grade?”); (4) understand cause and effect (e.g., “If the teacher doesn’t like you, what kind of grade do you think you would get?”); and (5) encouraging perspective taking (e.g., “Why do you think she would do this to you?”). When children are upset, their parents may discuss a range of topics with them—many of which are likely to affect their children’s appraisal of current and future events. It is unfortunate that researchers have yet to explore these processes.

Finally, it is important to point out that the use of the parental strategies in Table 2 does not necessarily result in encouraging “accurate” appraisals. Parents can model catastrophizing of minor events, they can dismiss the importance of a serious situation (e.g., “Hey. Come on. It’s no big deal.”), and in guiding appraisal parents may have an ax to grind (e.g., “People at that school never have been fair to our family.”).

Manageability

Self- and external blame have to do with the child’s appraisal of the cause of a potentially stressful situation; manageability has to do with the child’s ability to manage the situation once it has occurred. If a child receives a failing grade on a math test, he or she might believe that the cause of the failure is the self (e.g., low math ability or insufficient effort) or others (e.g., unfair teacher or test). Manageability in this situation refers to appraisals of the ability to manage the stress (e.g., still pass the course by doing better on subsequent exams). Therefore, when considering control appraisals, it is important to distinguish between control of the occurrence of the situation (i.e., blame) and control of its consequences (i.e., manageability).
Challenge appraisals are one of the most adaptive ways of appraising potentially manageable stressors. Research in the academic, health, sport, and social domains demonstrates that adults who appraise potentially stressful situations as a challenge show better levels of adjustment than those who do not (e.g., Armer, 1993; Hale & Whitehouse, 1998; Pakenham & Rinaldis, 2001; Skinner & Brewer, 2002). Unfortunately, no research could be found on challenge appraisals in children. One would expect, however, that such appraisals are effective for children as well, and that the parenting practices associated with child challenge appraisals may be the same as those associated with children’s internal locus of control and optimism. Parenting correlates of children’s internal locus of control that have been studied largely fall into the coaching and contextual pathways including parental reasoning, responsiveness, and low levels of control (Carton & Nowicki, 1994; Carton, Nowicki, & Balser, 1996; Chandler, Wolf, Cook, & Dugovics, 1980; Epstein & Kimorita, 1971; Loeb, 1975; Olvera, Remy, Power, Bellamy, & Hays, 2001). Regarding optimism, Hasan and Power (2002) found that optimistic children had parents who provided their children with autonomy in problem solving and who exhibited moderate levels of control. Although no research could be found on the modeling pathway, parents may influence their children through modeling as well.

A study by Parsons, Adler, and Kaczala (1982) provided an example of how parents can impact children’s appraisal processes in the academic area. They found that, in predicting children’s future expectations in math, parental expectations were much more powerful predictors than were the child’s actual past math successes and failures. Parents, they argue, serve as “filters” of their children’s reality by influencing children’s appraisal of their own abilities. Thus, in potentially stressful situations, whether children appraise them as a catastrophe or a challenge may depend on the statements that their parents make, the child statements that the parents attend to, or the nature of other parental behaviors.

Gain

Related to the concept of manageability is that of gain. Children not only differ in the degree to which they feel that they can manage a stressful situation, but also in the degree to which they believe that they may gain from the situation in the long run. For example, adolescents who use positive appraisal as a coping strategy show higher levels of adjustment than those who do not (Garneski, Kraaij, & Spinhoven, 2001; Kraaij et al., 2003). Although empirical research on the role of parents in this process has not
been conducted, it is likely that parents can influence this process through the modeling, coaching, and contextual pathways outlined in Table 2.

Predictability

Finally, children vary in the degree to which they appraise situations in terms of their predictability. Experimental studies of stress and coping—both in humans and in other species—show that when other factors are held constant, predictable stressors are easier to cope with than unpredictable ones (Seligman, 1975). Parents undoubtedly do much to help their children learn to anticipate when and in what situations potential stressors are likely to occur. Unfortunately, this appears to be a largely unstudied area of parent–child relationships.

Summary and Developmental Considerations

Parents likely have a significant impact on how their children respond to potentially stressful situations by influencing the nature of the child’s appraisal processes—that is, children’s appraisals of threat, significance, blame, manageability, gain, and predictability. The nature of parental influences, however, undoubtedly varies with the developmental level of the child. During infancy and toddlerhood, parents probably have their major impact on appraisal by influencing what the child views as physically threatening. As demonstrated in numerous studies of social referencing in the second year of life (Feinman, 1992), through modeling, parents of very young children can influence child appraisal of the dangerousness of people, objects, and events in the immediate environment. As children develop cognitively and are better able to consider threats outside of the immediate environment (e.g., what might happen to their mother on her way home from work or what grade they may receive at the end of the school year), parental influences on threat appraisal can broaden beyond the present situation and can also include psychological and social threats. As parental influences involve appraisal of events outside of the immediate environment, parental influences operate less through modeling and more through parental coaching of children’s appraisal (see Table 2).

As children move into middle childhood and adolescence, parents influence not only children’s appraisal of threat, but appraisal across a wider range of appraisal dimensions. Older children are influenced not only by what is happening but why it is happening, what they can do about it, and what it means for the their future. Therefore, parents increasingly influence their children’s responses to events by coaching children’s appraisal of blame, manageability, gain, and predictability.
Although the primary purpose of this review is to understand the nature of parental influences, it is important to consider children's effects on parents as well. Children likely have a significant impact on how their parents come to appraise child behavior, especially as parents have repeated experiences with their children in a given area. Take, for example, the dimension of self-blame in sports performance. Many parents, with an eye on a future college scholarship, may look forward to those early Little League years with a great deal of optimism and excitement. When their children have initial difficulties in the sport, they may engage in a bit of "attribution retraining" when their children say things such as "I'm just no good at this." Yet over time, many of these parents may learn that their children's early attributions were fairly accurate, and parents may shift their attributions and parenting accordingly.

The fact that parents are influenced by their children, however, does not mean that parents are unimportant in this area. A large number of the potentially stressful situations that children face are ambiguous and children often look to others to make sense of them. And especially during early and middle childhood, parents are the main "experts" to whom children turn. Parental influences in this area are potentially very powerful. A "B" on a test, for example, almost has no real meaning unless one views it in the context of parental standards and expectations. Parental influences on appraisal are potentially one of the greatest socialization influences in the stress and coping area.

**COPING**

As shown in Figure 1, once a child has appraised a situation as stressful, he or she may or may not attempt to cope with the stress. According to Folkman and Lazarus (1980), coping involves behaviors or cognitions (or both) that are directed at managing problems and the accompanying negative emotions. The relation between child coping and adjustment is complex and has been the focus of considerable empirical research (see Compas et al., 2001, for a review). Two approaches to understanding this process are used in this review: (1) examining the consequences of approach versus avoidance coping (e.g., Suls & Fletcher, 1985); and (2) examining the use of primary versus secondary coping strategies (Band & Weisz, 1988).

**Approach Versus Avoidance**

An important dimension along which most coping strategies can be categorized is approach-avoidance (Suls & Fletcher, 1985). Although avoid-
ance is generally seen as an ineffective approach to coping with stress, research on this technique with children and adolescents is mixed (e.g., Compas et al., 2001). We might expect that, in some situations (e.g., when the situation is rare and unlikely to reoccur), avoidance may be an effective means of coping. Also, there are different forms of avoidance—abusing substances to avoid confronting stress is obviously more self-destructive than taking a “mental health break” through distraction, relaxation, or exercise. Especially in uncontrollable situations, some forms of avoidance may serve as effective methods for coping—especially in the short run (Suls & Fletcher, 1985). If, however, avoidance is likely to lead to frequent reoccurrence of the problem, “approach” strategies may be more effective.

Numerous studies using coping checklists or interviews have been conducted on the general parenting correlates of children’s use of approach versus avoidance strategies. Specifically, parental warmth, support, acceptance, family cohesiveness, and firm rule enforcement are positively associated with active, approach, or problem-solving coping (Brook et al., 2002; Dusek & Danko, 1994; Herman & McHale, 1993; Kliwer, Fearnow, & Miller, 1996; Kliwer & Lewis, 1995; Lohman & Jarvis, 2000; McIntyre & Dusek, 1995; McKernon et al., 2001; Valentiner, Holahan, & Moos, 1994); family adaptability is negatively associated with disengagement (Brown et al., 1993); and parental warmth is negatively associated with using drugs and alcohol to cope with stress (Johnson & Pandina, 1991). The results for avoidant coping are mixed. Studies of adolescents show that it is associated with family conflict, authoritarian parenting, and low family cohesion (Hanson et al., 1989; Lohman & Jarvis, 2000; Wolfradt, Hempel, & Miles, 2003). In contrast, in a study of younger children, Hardy et al. (1993) found that avoidance was positively associated with maternal support (but only in situations where the child had no control).

Along with examining such general parenting correlates of children’s coping style, the checklist studies also have examined a more specific pathway of influence—that is, parental modeling. Several studies have examined similarities between parents’ and children’s coping styles. In these studies, however, few one-to-one relations between parents’ and children’s strategies have emerged, and the pattern of correlation often varies by gender. Kliwer et al. (1996), in a community sample of 9- to 12-year-olds, found that for three coping factors (active coping, denial or avoidance, and social support seeking) examined separately for mothers and fathers of boys and girls (12 possible relations), only a single one-to-one relation was significant—fathers of boys who used active coping had sons most likely to do the same. Similarly, in a study of families with a critically ill parent (Kotchick, Forehand, Wierson, Armistead, & Klein, 1996), when two coping strategies were examined (active and
avoidant—again, separately for mothers and fathers of boys and girls—8 possible relations), only a single one-to-one correlation was significant, but in the negative direction—avoidant coping by mothers was negatively correlated with avoidant coping by sons. Finally, in three studies of children with sickle cell disease (Brown et al., 1993; Gil, Williams, Thompson, & Kinney, 1991; Kliewer & Lewis, 1995), only one found a significant one-to-one correlation, but only for one coping strategy—passive adherence (Gil et al., 1991). Although these studies do not rule out the possibility that children model their parents’ approach to coping (e.g., the child and parent coping checklists may not be equivalent) they provide little support for the role of modeling in approach-avoidance.

Surprisingly, besides the studies of modeling, only four self-report studies have examined more specific parenting behaviors beyond general dimensions such as support and control. Kliewer et al. (1996) had mothers and fathers of 9- to 12-year-olds rate how often they encouraged their children to engage in six kinds of coping strategies: active, positive cognitive restructuring, avoidance, distraction, support seeking, and negative actions. In their analyses they ran separate regressions for mothers and fathers of boys and girls predicting four child coping outcomes (active, distraction, avoidance, and support coping) from the six parental suggestions (a total of 16 regressions). Because only two of these regressions were significant (and the pattern of results was inconsistent), they provide limited information about the role of parental coping suggestions.

These results differ from those of Shipman and Zeman (2001) who found that 6- to 12-year-olds’ reports of effective coping (i.e., behavioral or cognitive distraction, seeking social support, expressing appropriate emotion) were positively associated with mothers’ reports of suggesting effective coping strategies.

Prinstein, La Greca, Vernberg, and Silverman (1996) examined the effects of three kinds of coping assistance (emotional processing; re-institution of familiar roles and routines; and distraction) on children’s coping responses to Hurricane Andrew. Children reported on their own coping strategies and on the coping assistance that they received from parents, teachers, and friends. All three forms of coping assistance from parents were positively associated with positive coping (i.e., problem solving, cognitive restructuring, social support, and adaptive emotional regulation), and both emotional processing and distraction assistance were positively associated with the use of distraction coping.

Finally, Eisenberg, Fabes, and Murphy (1996), in a study of 8- to 12-year-olds, reported a number of significant relations between mothers’ and fathers’ reported reactions to their children’s negative emotions and mothers’ and teachers’ ratings of children’s coping strategies. Although
there were more significant findings for mothers and than for fathers, in general, positive parental reactions to children’s negative emotions (i.e., encouragement of expression and problem focused reactions) tended to be positively associated with constructive coping (i.e., high levels of positive cognitive restructuring, seeking social support, and problem solving and low levels of aggressive actions), whereas punitive or minimizing reactions tended to be negatively associated with constructive coping and positively associated with avoidant coping.

Although these studies provide a good start in helping us understand parents’ contributions to the coping process, most provide very little in the way of specific mechanisms of parental influence—that is, they tell us little about the specific things that warm, supportive parents do to help their children cope with potentially stressful situations. Moreover, like all correlational studies, the findings say nothing about the direction of effects (e.g., children who use approach versus avoidant strategies might be easier for parents to be supportive of) or about the effects of unmeasured third variables (e.g., children who use approach strategies and parents who are warm and accepting may share similar genes that account for these behaviors, or parents who are warm and accepting may devote more effort to helping their children cope with stress than parents who are not). Finally, as considered in more detail in the section on directions for future research, the use of self-report coping measures tells us little about the coping process as it unfolds. Without observational data, it is difficult to examine specific parental influences on children’s coping.

Fortunately, a growing literature in the area of children’s emotional regulation is beginning to provide the kinds of observational data that can help provide insights into the nature of parental effects. Although not all of the authors of these articles used the words “stress” or “coping” in their articles, studies of emotional regulation often examine the strategies that children use to manage or control negative emotions—an integral part of the stress and coping process. Presented in Table 3 are specific parenting practices that have been identified in these and other studies. We now turn to a review of this research with an eye on how these studies might provide insight into parental influences on children’s coping with potentially stressful events.

Studies of the parenting correlates of children’s emotional regulation have assessed emotional regulation in three ways: (1) parents’ or teachers’ ratings of emotional regulation (Eisenberg et al., 1999, 2001, 2003; Ramsen & Hubbard, 2002); (2) children’s emotional regulation in structured laboratory situations (Calkins & Johnson, 1998; Calkins, Smith, Gill, & Johnson, 1998; Garner, 1995; Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002; Spinrad, Stifter, Donelan-McCall, & Turner, 2004); and (3) observations of
children in interactions with their peers in a preschool setting (Eisenberg & Fabes, 1994; Garner & Estep, 2001). The laboratory sessions have involved mother–child separation, frustration situations (such as the child being retrained in a high chair or shown an attractive toy or cookie inside a clear plastic box), or a disappointment task (the child is told that he or she will receive one of several prizes and receives his or her least favorite prize). (Note: In all of these studies, the experimenters went to great lengths to ensure that the children left the sessions in a good mood, by, for example, eventually letting them play with the restricted toy or by letting them trade the disappointing prize for their favorite.)

Effective emotional regulation strategies in these studies include self-soothing in the study of toddler separation (Garner, 1995); distraction and problem solving in the frustration situations (e.g., Calkins & Johnson, 1998; Calkins et al., 1998; Gilliom et al., 2002); positive affect and distraction in the disappointment task (Spinrad et al., 2004); and escape and verbal objections in the peer observation studies (Eisenberg & Fabes, 1994;
Garner & Estep, 2001). Poor emotional regulation was defined as emotional distress in the laboratory tasks, attending to the desired object in the frustration task (Calkins et al., 1998), and revenge and tattling in the peer interaction tasks (Eisenberg & Fabes, 1994; Garner & Estep, 2001).

In general, the results of these studies provide empirical support for the possible role of many of the parenting practices in Table 3. As would be expected, many of the predictors of children’s emotional regulation concerned emotional aspects of the parent–child relationship. Maternal positive emotion (i.e., warm, accepting control; positive maternal expressiveness) positively predicted measures of children’s emotional regulation, including distraction in a frustration task (Gilliom et al., 2002), self-soothing on separation (Garner, 1995), and parents’ and teacher’s ratings of effortful control (Eisenberg et al., 2003). Measures of maternal negative emotion, especially anger, predicted poorer regulation. For example, Calkins and colleagues (1998) found that negative parental control was positively associated with attending to the desired object in the frustration tasks and negatively associated with distraction. Similarly, Garner and Estep (2001) found that maternal anger directed toward the child was positively associated with their measure of nonconstructive anger responses toward peers (i.e., tattling, venting, and verbal and physical retaliation).

Maternal responses to children’s emotions also appear to be important. Four types of responses have been studied (see Table 3). Three of these were positively associated with emotional regulation: (1) maternal acceptance of children’s emotional expression was positively associated with teachers’ and parents’ ratings of emotional regulation (Ramsen & Hubbard, 2002); (2) mothers who helped children process their emotions (i.e., linked, through discussion, their child’s emotional experiences to the emotional experiences of others) had children with lower parent and teacher ratings of unregulated emotional expressivity (Eisenberg et al., 2001); and (3) maternal soothing of child distress was positively associated with the later use of distraction in a disappointment task (Spinrad et al., 2004) and positively associated with children’s use of verbal objections to cope with anger in a peer setting (Eisenberg & Fabes, 1994). The questioning or punishing of child emotional expression, in contrast, was negatively related to parents’ ratings of self-regulation (Eisenberg et al., 1999), positively associated with the use of no observable coping strategy in a disappointment situation (Spinrad et al., 2004), and, unexpectedly, positively associated with escape in the peer anger situation (Eisenberg & Fabes, 1994).

Finally, there was evidence that children whose parents interfered with the child’s ability to approach difficult situations (i.e., “do for child” in Table 3) had children who showed poorer emotional regulation in other situ-
ations. Calkins and Johnson (1998) found that mothers who showed higher levels of preventive interference in a series of play, teaching, and compliance tasks (i.e., prevented children from completing the activities on their own) had children who showed higher levels of distress in a frustration task, and Spinrad and colleagues (2004) found that mothers who gave into their children’s wishes during a frustration task at 18 months (i.e., did not allow their children to continue to try to solve the problem on their own) had children who showed poorer emotional regulation (i.e., more negative affect) in a disappointment task 3½ years later.

Some of the most detailed, observational studies of parents trying to help their children cope with stressful situations have been in medical settings. As described previously, in the typical study, parents’ and children’s behavior are observed before and during a potentially stressful medical procedure. Although the frequency of most parental behaviors in these situations is positively associated with child distress (see previous discussion of appraisal), distraction is one parental behavior that typically shows a negative correlation (Blount et al., 1989; Bush & Cockrell, 1987; Bush et al., 1986; Lumley, Abeles, Melamed, Pistone, & Johnson, 1990; Manne et al., 1992). Although the effects of distraction may be different for different children (Lumley et al., 1990, found that distraction was more effective for children with “withdrawal” versus “approach” temperaments), at least four experimental studies have demonstrated the causal impact of distraction on reducing child distress (Blount et al., 1992; Dahlquist, Pendley, Landthrip, Jones, & Steuber, 2002; Gonzalez, Routh, & Armstrong, 1993; Manimala et al., 2000).

Other studies that have used more elaborated measures of children’s and parents’ behavior have tried to go beyond analyses of individual behaviors, but a close examination of their findings suggests that their major results may be due to the effects of distraction (i.e., Blount et al., 1990; Frank et al., 1995; Manne et al., 1992; Salmon & Pereira, 2002). Therefore, at least in painful medical situations, a form of avoidance (i.e., distraction) is positively associated with coping effectiveness. Given the level of distress that these situations generate, parental behaviors that encourage approach coping may exacerbate child distress—the stress is simply too much for the child to handle.

Primary Versus Secondary Strategies

Besides learning how to approach difficult, although manageable, situations, children must learn which specific coping strategies are most effective in which situations. A model offered by Band and Weisz (1988) is useful in this regard. Band and Weisz (1988) distinguished between two types
of coping strategies—primary strategies, which involve changing aspects of the situation to reduce the source of stress (e.g., problem solving), and secondary strategies, which involve changing oneself to fit the situation (e.g., acceptance). According to these authors, the effectiveness of these strategies varies as a function of the controllability (i.e., manageability) of the situation. Specifically, “primary” coping strategies are best for situations in which children have control, and “secondary” strategies are best for those situations where children do not. When control perceptions and coping strategies line up in these ways, they are said to “match.”

Research on adults supports the “match” hypothesis for controllable events. Specifically, in controllable situations only, the use of problem-focused coping (a primary coping strategy) is associated with greater coping efficacy and less psychological distress (Conway & Terry, 1992; Osowiecki & Compas, 1998, 1999; Vitaliano, DeWolfe, Maiuro, Russo, & Katon, 1990), whereas emotion-focused coping (a secondary strategy) is related to greater psychological distress (Conway & Terry, 1992; Vitaliano et al., 1990). A study with adolescents confirms the positive association between problem-focused coping and adjustment in controllable situations (Compas, Malcarne, & Fondacaro, 1988).

Regarding secondary strategies, the use of emotional “approach” strategies (e.g., talking about and processing one’s feelings) is positively associated with adjustment to uncontrollable events (Terry & Hynes, 1998). In two studies with children that specifically examined secondary control strategies, Weisz and colleagues (Band & Weisz, 1990; Weisz, McCabe, & Denning, 1994) found that their use was positively associated with adjustment in children with leukemia (a condition where the child has little control over the stressor) and negatively associated with adjustment for children with diabetes (a condition where the child has considerable control). Finally, in the research on painful medical situations previously reviewed, a secondary coping strategy (distraction) facilitated child adjustment in these uncontrollable situations.

One limitation of the Band and Weisz (1988) approach is it does not differentiate between adaptive and nonadaptive primary and secondary strategies. A child could, for example, use aggression (a primary strategy) to terminate taunting by a peer, but such an approach is unlikely to be effective in the long run for reducing stress (e.g., the child may suffer repercussions from teachers or parents for the aggressive behavior). Similarly, in an uncontrollable situation a child could blame him- or herself for parental marital conflict and accept the “fact” that he or she is the kind of person who causes trouble for others. Although this is a secondary strategy (and therefore a “match”), it is likely much more harmful than accepting the “fact” that even loving parents sometimes argue with one another when they disagree.
Primary coping strategies. So how do children learn to employ primary coping strategies in controllable situations? Effective problem solving requires a number of steps including analyzing the situation and determining which strategies are required; generating and evaluating multiple approaches to solving the problem; goal directiveness, perseverance, and patience in problem solving; flexibility and responsiveness to feedback; and seeking help and support when needed (D’Zurilla & Goldfried, 1971; Shure, 1982). To develop competence in all of these areas requires a considerable amount of experience. So, despite the widely held belief that problem-solving approaches are effective in coping with controllable situations, there are a number of ways that children who attempt problem solving in stressful situations may not succeed. Moreover, those who do not succeed may be the most likely to resort to antisocial strategies such as impulsiveness and aggression.

Although we have learned much in recent years about how parents facilitate their children’s problem solving (see the following paragraphs), this research has been conducted primarily in the academic area. Although such studies should provide some insight into how children cope with one kind of stressful situation, academic failure, because this research was not conceptualized from a stress and coping perspective, the focus has been more on how parents facilitate child success rather than on how parents help their children cope with failure. The studies do, however, help identify a range of ways that parents can support their children’s problem solving across a range of situations—particularly from a scaffolding perspective (Wood et al., 1976). These parental strategies are listed under “assist” in Table 3. Research shows that children who approach problem-solving tasks in a planful, persistent, and self-regulated way have parents who are encouraging, display positive attitudes about the child’s abilities, help the child set goals, provide “metacognitive” information about the task, scaffold child performance (i.e., break the task down into manageable steps and sensitively gear the level of parental support to the child’s performance level), encourage persistence, teach self-monitoring, promote adaptability, and support the child’s autonomy (Connor, Knight, & Cross, 1997; Fagot & Gauvain, 1997; Gauvain, Fagot, Leve, & Kavanagh, 2002; Grolnick & Ryan, 1989; Martinez-Pons, 1995; Neitzel & Stright, 2003; Portes, Zady, & Dunham, 1998; Pratt, Green, MacVicar, & Bountrogianni, 1992; Pratt, Kerig, Cowan, & Cowan, 1988; Stright, Neitzel, Sears, & Hoke-Sinex, 2001).

Although the studies on emotional regulation previously cited do not provide the kind of detailed descriptions of parental behavior found in the problem solving literature, they do provide some data that suggest that parents can assist their children in primary coping strategies. Calkins and
Johnson (1998) found that maternal positive guidance during teaching, play, and compliance tasks positively predicted children’s use of distraction and “constructive coping” (i.e., problem solving) in their frustration tasks. Similarly, Spinrad and colleagues (2004) found that mothers who used more strategies to help their children cope in a frustration task at 30 months had children who showed more positive affect and less negative affect in the disappointment task 2½ years later. Finally, Eisenberg and Fabes (1994) found that mothers who reported responding to their child’s negative emotions by “encouraging constructive action,” had children who were more likely to use escape strategies when experiencing anger with their peers. Because they found that the use of escape was associated with both constructive and punishing parental behaviors (recall that escape was also positively associated with punishing reactions to negative emotions), Eisenberg and Fabes (1994, p. 153) argued that:

It is likely that some children escape when angered due to problems in asserting and expressing themselves, whereas others do so because they find that leaving the conflicted context sometimes is a way to defuse anger or control their own behavior.

Such an interpretation is consistent with a number of studies in young children that escape is sometimes an adaptive coping method (e.g., Hardy et al., 1993; Kliewer, 1991).

Secondary coping strategies. Although secondary coping strategies appear to be most appropriate in unmanageable situations, children employ them less frequently than do adults (Band & Weisz, 1988). These include strategies such as putting difficulties in perspective, social comparison, positive reinterpretation, finding meaning in events, forgiving others, and seeing the situation as creating opportunities for personal growth. Given the cognitive complexity of secondary strategies, it is not surprising that children do not employ them as often as they use primary strategies. However, children and adolescents who use secondary control strategies to cope with uncontrollable situations usually show better adjustment than those who do not (e.g., Garnefski et al., 2001; Jeney-Gammon, Daugherty, Finch, Belter, & Foster, 1993; Kraaij et al., 2003).

Parents probably influence their children’s use of secondary strategies—especially helping children find meaning or something positive in uncontrollable negative situations. Successful parents probably do not do this right away—it is probably more important to first help children express and process their feelings and to find something controllable in the situation. But eventually, successful parents may help their children find
meaning in events—not by spelling it out for them, but by helping children come to their own understanding.

Research on the parenting correlates of secondary strategies is difficult to find. Punamaki and Suleiman (1990), however, provide an excellent example of how such research can be conducted. They interviewed a sample of 8- to 14-year-old Palestinian children and their mothers living in the occupied territories. Children’s use of “cognitive” coping strategies to cope with political violence (e.g., “to try to make sense of the experience”) was positively associated with the level of the mother’s social-political activity. The information politically active mothers provided to their children may have helped their children integrate the experience of violence into a political framework that gave it meaning and helped lessen its negative impact.

Summary and Developmental Considerations

Despite the likelihood that a “match” between control perceptions and the nature of the coping strategy may lead to adjustment, such matches usually account for only a limited amount of variance in child outcomes. Stressful situations are complex and involve an ongoing interaction between individuals and their environments. “Controllable” situations often have uncontrollable aspects and vice versa; individuals often shift between the use of primary and secondary strategies; and so on.

Coping is a complex, flexible process that unfolds over time. Presented in Figure 2 are pairs of constructs that help illustrate this complexity. The pairs represent differences in responses to potentially stressful events. Based on the previous research reviewed, the approaches in the left hand column represent those that are most often associated with positive out-

![FIGURE 2](Contrasting Approaches to Coping with Stress.)
comes—especially for controllable events. In most situations (i.e., situations where there is likely some degree of control), children who successfully cope with stressful events may initially show these characteristics (i.e., approach, analysis, optimism, perseverance, autonomy, and problem solving), but over time may switch to some of the strategies in the right hand column. As new aspects of the situation are encountered, children may switch back and forth between the two. Successful copers undoubtedly show a flexible approach to coping by meeting the changing demands of the events as they unfold.

As a review of the research this section demonstrates, we are just beginning to understand some of the ways that parents may contribute to children’s coping behaviors. Parents likely influence their children’s coping behaviors through the emotional climate they set in the home, through their responses to their children’s emotions, and through the scaffolding of problem solving and finding meaning.

As was the case for both protective practices and appraisal, the parenting approaches that are most effective likely vary significantly depending on the developmental level of the child. Although emotional climate of the home is always important, these variables may be particularly important during the infancy and toddler years as the child learns to read and express emotions and is developing an affective relationship with the parents (e.g., Ainsworth, Blehar, Waters, & Wall, 1978). As children move into the early and middle childhood, they begin to internalize family and cultural emotional display rules (Cole, 1986; Saarni, 1979) that are critical for successful socialization. Lessons in emotional understanding and emotional display rules are probably learned through modeling and parental responses to children’s emotional expression (see Table 3).

As children move from early to middle childhood, children become more effective at applying strategies to regulate their emotions and parents undoubtedly influence the development of these skills through scaffolding their children’s problem solving (see the “assist” categories in Table 3). The nature of parental guidance and support would vary with the developmental level of the child, with parental behavior during the early years focusing on teaching simple strategies such as distraction and escape and later behavior focusing on more complex strategies involving the generation and evaluation of multiple alternatives. As children develop cognitively, parents probably spend considerable more time helping them develop effective secondary strategies for dealing with situations in which the child has little control. Finally, with increasing child age, parents probably devote greater effort to helping children assess the manageability of various aspects of different situations and choosing the most appropriate coping strategies for the task at hand.
Again, it is best to view this as a bidirectional process, with parents helping children acquire various approaches to coping and the child’s developing coping repertoire influencing parental behavior as well. Sensitive parents undoubtedly learn which coping approaches work best for each individual child and then support the development of these approaches.

SUMMARY AND DIRECTIONS FOR FUTURE RESEARCH

In this review, I have tried to identify some of the specific pathways through which parents influence their children’s responses to potentially stressful events. In so doing, I have identified numerous gaps in our knowledge. Although this is a first step, much remains to be done.

Potentially Stressful Events

It is clear that many parents attempt to protect their children from many kinds of potentially stressful situations—for example, marital conflict; antisocial peers; media sex and violence; dangerous objects and places. This conclusion is based on a review of several literatures. No study directly compared the emphasis that parents place on certain areas over others. Information is not available on how parental protection varies with child age, gender, ethnicity, social class, or culture. The areas that we know the most about are those that are high priority research areas for other reasons. For example, we know much more about maternal disclosure of HIV or AIDS status than about the disclosure of family financial difficulties.

To more fully understand the influence of parents on children’s coping, we need systematic, descriptive studies of the parents’ protective role. Such research would give us a more complete understanding of how parents attempt to protect their children from potentially stressful situations, as well as the factors that may influence the degree and nature of protection (e.g., neighborhood safety, marital quality, and parental education). Obviously not all parents are equally able to provide the kind and nature of protection that they desire, and parents may differ in the degree to which they think such protection is necessary or important.

By examining child age and gender differences in protection, we could increase our ability to differentiate between appropriate and overprotective parenting. Current definitions of overprotection rely on the subjective judgments of the investigator. By providing normative data on the extent and nature of parental protection at various ages, we can begin to develop definitions of overprotection that place it in a normative developmental context.
Research on the effectiveness and developmental consequences of parental protective practices should be conducted as well. As previously reviewed, proactive, protective strategies are effective for those parents who use them, but the research has been restricted to a small number of areas (i.e., peer relationships, television, and childhood safety). Proactive parenting has received limited research attention (Holden & West, 1989)—more research on these important strategies is necessary.

Future studies of protection need to address the methodological shortcomings of previous research. Data in most studies reviewed here were collected at a single point in time, relying on the self-reports of one parent (usually the mother). Moreover, few studies have identified or controlled for possible third variables that might account for the relations between parenting behavior and child outcomes. Future studies need to employ multiple methods (e.g., questionnaires, interviews, observations), multiple informants (e.g., mothers, fathers, siblings, children), longitudinal analyses, and correlational, experimental, and quasi-experimental designs. Researchers need not rely solely on self-reports. Kuczynski (1987), for example, developed a creative way of observing mothers’ strategies to prepare their children for a potentially stressful medical examination.

In conducting this research, we also need to recognize the bidirectional nature of parent–child relationships (e.g., Crouter & Booth, 2003). Parental protectiveness in specific situations may be a function of the child’s reactions to similar situations in the past. For example, children who, by their temperament, show negative reactions to novelty, may have parents who engage in more vigilant protective practices than parents of children who do not. Parental protectiveness might best be viewed as part of a dynamic system where the nature and amount of child feedback plays a regulatory role in guiding parental behavior. The issue of bidirectionality needs to be considered more directly in the appraisal and coping areas as well.

Appraisal

Researchers are just beginning to explore the nature of children’s appraisal of potentially stressful situations. To better understand the nature of parental influences, much more work is needed to understand developmental, gender, and individual differences in children’s appraisal styles. The majority of studies in this area have addressed specific types of “errors” in children’s thinking that put children at risk for psychopathology (i.e., depressive attributional style and hostile attributional bias). Because appraisal is so central to the stress and coping process, we need a much better understanding of how children appraise day-to-day potentially stressful events in their lives.
Research on depressive attributional style and hostile attributional bias suggests that parents may play an important role in socializing these processes. Childrearing practices (in particular criticism and punishment) appear to be more important than modeling (e.g., Garber & Flynn, 2001; Gomez & Gomez, 2000; Jaenicke et al., 1987). Surprisingly, few studies have found significant correlations between parents’ and children’s attributional styles (of five studies located for this review, only one found a significant parent–child correlation—Seligman et al., 1984). Although such findings do not rule out the possibility that modeling occurs, they provide little support for the role of modeling in the development of attributional style.

Although these studies provide a good start in understanding parents’ impact on children’s appraisal, they have their limitations. With the exception of one study (Jaenicke et al., 1987), all studies employed either children’s or parents’ reports of parenting. Given the many limitations of self-reports (e.g., social desirability; reconstructive memory; difficulties in objective, self-observation), the use of multiple methods (including observations) is preferable. Self-reports are particularly problematic when the reports of appraisal and childrearing come from the same source (e.g., Cassisdy et al., 1996; Gomez & Gomez, 2000; Schwarz et al., 2000; Toth et al., 2002). In such studies, the correlation could simply reflect the tendency of the child’s appraisal “errors” to distort the child’s perceptions of parental behavior as well.

Another issue that needs to be considered regarding appraisal (something that applies to the other two pathways as well) is the role of genetic similarities between parents and their children. Because many aspects of personality have a genetic component (and personality often influences appraisal style), parent–child similarities in appraisal may not reflect the operation of modeling at all, but are a consequence of genetic factors. Although few parent–child correlations in appraisal style have been found to date, any that are found need to be interpreted within a behavioral genetic framework. Ideally, the use of genetically sensitive designs (e.g., twin studies, adoption studies) would allow researchers to tease out the contributions of genetics and environment (e.g., Plomin, DeFries, McClearn, & Rutter, 1997).

Future research on appraisal should employ a variety of methods. One effective way would be to observe parent–child interactions in structured situations. Children and parents, for example, could work together on a difficult achievement task, and the investigator could assess participants’ appraisals, expectations, and attributions at various points along the way (e.g., at the beginning of the session, after a failure, after a success). To begin to untangle the direction of causality, experimental methods could be
applied as well, manipulating such variables as task difficulty, opportunities for parental feedback, and so on.

Finally, longitudinal studies on the development of children’s appraisal style should be conducted. Researchers, for example, could examine the ways that developmental changes in children’s thinking interact with individual differences in parenting in the development of children’s appraisal styles.

Coping

Of all the pathways specified in Figure 1, the relation between parenting and child coping has received the most research attention. Children who approach potentially stressful events with active forms of coping have parents who are warm and supportive, and who employ authoritative control practices (e.g., Brook et al., 2002; Herman & McHale, 1993; Kliewer et al., 1996; McKernon et al., 2001; Valentiner et al., 1994). However, few data are available on more specific paths of influence. As was the case with appraisal, there is little support for modeling—parents’ and children’s responses to coping questionnaires show few significant correlations (i.e., Brown et al., 1993; Gill et al., 1991; Kliewer et al., 1996; Kliewer & Lewis, 1995; Kotchick et al., 1996).

Outside the medical setting, and the growing literature on emotional regulation, most studies of parenting and children’s coping have used standardized coping checklists. These inventories share many of the methodological short-comings of parenting self-reports. Critics of this approach argue that these methods reduce complex, social interactional processes to reconstructed memories that may focus mostly on the strategies that were used most frequently or were the most successful (for a typical methodological critique and a response, see Coyne & Racioppo, 2000; Lazarus, 2000). Moreover, as previously noted, when information on parenting practices and coping styles both come from the child (e.g., Dusek & Danko, 1994; Johnson & Pandina, 1991; McIntyre & Dusek, 1995; Valentiner et al., 1994), the correlations may reflect cognitive processes inside of the rater’s head rather than an actual relation between parenting practices and children’s coping behavior (i.e., the methods share a common source of variance). Children who are depressed, for example, might be more likely to rate their relationship with their parents as negative and be less likely to remember using active coping.

Researchers who study stress and coping in children need to take the lead from researchers in the adult area who use a combination of strategies (e.g., diaries, daily phone interviews, computer assisted technology) to describe stress and coping processes as they unfold (e.g., Somerfield & Mc-
Moreover, researchers need to study children and parents in naturally occurring situations where they experience stress (e.g., the doctor’s office), as well as develop additional ethical, laboratory-based situations for observing parents helping their children with difficult situations. Finally, we need to identify the wider ecological factors (e.g., parenting stress, neighborhood factors, culture) that influence the approaches that parents use in teaching their children to cope. It would be particularly informative to examine how these larger ecological and parenting factors interact with child temperamental variables (such as emotional intensity, self-regulation, and distress threshold) to influence the child’s developing coping abilities.

**IMPLICATIONS FOR PRACTICE**

Given the important roles that parents play in helping their children cope with stress, it is unfortunate that we know so little about these processes. As more research is conducted, it can be used to develop and evaluate effective parent education programs. But because practitioners have a job to do even when “more research is needed,” some practical guidelines based on the research to date are presented here.

First, parents need to learn to differentiate between the kinds of potentially stressful situations that their child can learn from and those that are too disruptive for learning to occur. They then can implement proactive strategies to help minimize child exposure to the most disruptive situations and provide support for learning in more manageable ones. They need to set and enforce age-appropriate rules through authoritative control; supervise and monitor children’s activities; and promote positive alternatives to potentially harmful activities. In regulating child exposure, parents need to be sensitive to the developmental level of their child to avoid becoming overprotective as the child develops new coping skills. This is consistent with the goal of scaffolding—to give support to the child and then gradually withdraw it as he or she develops independent coping abilities.

When children are exposed to potentially stressful events, parents need to avoid inadvertently transmitting messages that can undermine successful coping. That is, they need to take extreme care not to communicate (either verbally or nonverbally) that the child is not capable of coping, or that the child somehow deserves what happened when he or she did not contribute to the cause. Instead, through acceptance and encouragement, parents should communicate that their child is capable of coping, even if coping requires positive reappraisal or acceptance. They also can help children
appraise ambiguous or threatening events in ways that lead to effective coping.

Finally, as children get older, parents need to help them realistically understand what they can manage and control, and how to cope successfully with uncontrollable situations. Employing strategies such as positive reinterpretation, putting difficulties in perspective, and finding meaning requires a number of high level cognitive skills such as perspective-taking, causal understanding, and wisdom—skills not well developed in young children (or even in many adults). Through positive responses to children’s emotional expression, through scaffolding, and through age-appropriate language and explanations, parents can do much to facilitate the development of coping and problem solving skills in their children. The more parents can help their children approach difficult situations through the processes outlined in this review, the more children will develop the skills that they need to adapt to a constantly changing and challenging world.

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