

CHAPTER 21

DAILY STRESS AND COPING IN CHILDHOOD AND ADOLESCENCE

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This chapter summarizes research on how children respond to common negative experiences, such as feeling rejected by peers or overhearing an argument between parents. It does not focus on major traumatic events in a child's life, such as the loss of a parent, nor does it include growing up in high-risk environments, such as those characterized by poverty and high levels of community violence. Instead, the focus is on the kinds of events that *all* children will be exposed to at some point in their lives, but that *some* children will experience almost every day. The research literature in this area is at an early stage of development, with limited substantive knowledge and few well-accepted conclusions. This chapter therefore focuses attention on the ways that questions are posed about responses to common stressful events in childhood and on the research methods that are used to address those questions. The chapter also summarizes the evidence that exists for effects of chronic stressors on the well-being of youth, in particular their psychological adjustment and development, and emerging information about the various ways that children react to and attempt to cope with these daily events. Several different research literatures are discussed. In addition to an overview of traditional child stress-and-coping research,

we look to other literatures for a possible foreshadowing of future directions in the field. In particular, our discussion centers on three bodies of research that health psychologists often seem to ignore: developmental psychologists' investigations of problems in peer relationships and academic failure, and the work of marital and developmental researchers on reactions to exposure to conflict and anger between parents.

DAILY STRESSORS IN CHILDHOOD AND ADOLESCENCE

The Conceptualization and Measurement of Daily Stressors

Like the research literature on adults, child stress-and-coping studies have focused primarily on the impact of major events on children's lives. This research tradition typically emphasizes unwanted and uncontrollable changes that confront some children, such as a move to a new neighborhood, a major illness in the family, parental divorce, or the death of a parent or sibling. There is no doubt that these events place an enormous strain on families and can cause emotional

distress and significant adjustment problems in childhood and adolescence. In the late 1980s, researchers began to report that the impact of major events on children may be best understood by an analysis of the numerous, seemingly more minor, changes in a child's life that result from the initial event (Compas, Howell, Phares, Williams, & Ledoux, 1989; Tolan, Miller, & Thomas, 1988). For example, the effects of parental divorce, *per se*, may not be nearly as great as the quality of the child's subsequent family situation, such as the extent to which the child feels caught between the divorced parents or the level of organization and routine in the home provided by the custodial parent (Buchanan, Maccoby, & Dornbusch, 1991; Monahan, Buchanan, Maccoby, & Dornbusch, 1993). Similarly, the direct effects of having a seriously ill sibling may not be as strong as the indirect effects caused by changes in family relationships (Lobato, Faust, & Spirito, 1988). A move to a new neighborhood probably also requires an analysis of the immediate demands that the change imposes on a child, such as developing new friendships and adjusting to a new school.

Studies suggesting that daily stressors mediate the impact of major life events have spurred researchers' interest in the cumulative effects of more minor daily events. There is now a growing literature focusing on adolescents' reports of their exposure to common chronic stressors. Many of the measures used in this literature were developed on the basis of lists of daily hassles or minor negative events provided by adolescents. Interestingly, all of the adolescent-report scales include interpersonal problems, such as conflicts with parents, teachers, siblings, or friends; feeling lonely or left out of peer groups; boyfriend/girlfriend problems; or observations of parental arguments. Some even focus exclusively on the interpersonal domain (Daniels & Moos, 1990; Timko, Moos, & Michelson, 1993). Most of these scales, however, assess a mixture of interpersonal difficulties and a wide variety of other stressors. A review of the items reveals the other kinds of daily problems, irritations, and difficulties that teens may experience, such as doing homework, getting a bad grade, skin problems, worries about health or the future, waiting in lines, racial tensions at school, peer pressures, fear of theft or violence, problems with a job, not doing well at sports, boredom, not being able to dress in a desired

manner, financial problems, and being overweight (Armstrong, 1989; Bobo, Gilchrist, Elmer, Snow, & Schinke, 1986; Compas, Davis, Forsythe, & Wagner, 1987; DuBois, Felner, Brand, Adan, & Evans, 1992; Ham & Larson, 1990; Siegel & Brown, 1988). Some of the daily hassles scales have been used with children in younger age groups as well (Banez & Compas, 1990).

In addition to great heterogeneity in the substantive content of the daily events that are studied, some measures combine chronic ongoing problems with major life events (e.g., Cowen et al., 1991; Compas, Davis, Forsythe, & Wagner, 1987) to obtain an omnibus rating of the child's overall level of exposure to stressors. Although measures of chronic or daily stressors in childhood and adolescence include quite disparate kinds of experiences, attempts are sometimes made to categorize the stressors in meaningful ways. For example, some studies distinguish between expected and unexpected events (Ham & Larson, 1990) or controllable and uncontrollable situations (DuBois et al., 1992).

Effects of Daily Stressors on Child and Adolescent Development

Does exposure to a wide variety of common daily stressors increase a child's or an adolescent's risk for developing emotional or behavioral problems? Several cross-sectional correlational studies suggest that the answer is yes. Investigations of children, ranging from fourth grade through high school, indicate that self-reported mood, illness symptoms, and behavior problems correlate with child reports of daily hassles (Siegel & Brown, 1988; Tolan, 1988). The significant association between experiences with daily hassles and psychological adjustment persists even when researchers control for the effects of other important factors, such as the occurrence of major negative life events or positive daily events in the child's life (Daniels & Moos, 1990; Kanner et al., 1987), or exposure to parents' daily hassles and psychological symptoms (Banez & Compas, 1990). Some studies have found that perceived exposure to many minor daily stressors also predicts increases, over a one- to two-year period, in children's and adolescents' reports of their psychological adjustment (Compas, Howell, Phares, Williams, & Giunta, 1989; DuBois et

al., 1992). However, in one study of girls, a prospective association between common negative events and two outcomes, depressed mood and illness symptoms, was found only for some of the girls, specifically those who felt that there had been few concurrent positive changes in their lives (Siegel & Brown, 1988).

The literature on daily hassles presents several challenges for researchers trying to understand how stressors influence children's health and development. A strong reliance on child self-reports raises a question about the role of respondent biases in these data. For example, it is interesting that results of studies like those just cited are not as strong when parents' ratings of child outcomes are used instead of child self-reported well-being (Banez & Compas, 1990; Compas, Howell, Phares, Williams, & Giunta, 1989). Even more important than the possibility of respondent biases inflating correlations is the complex problem of determining causal priority in this literature. Many of the stressful events assessed in measures of daily hassles are the kinds of experiences that may be evoked by the child. For example, interpersonal problems with peers, parents, or teachers are determined, in part, by certain aspects of a child's psychological functioning, such as his or her general mood and level of aggressive behavior. It is therefore not surprising that some prospective analyses suggest a reciprocal association between child maladjustment and daily stress. Just as stress predicts future adjustment, emotional or behavioral problems in children can predict subsequent increases in their reports of daily stressors (Compas, Howell, Phares, Williams, & Giunta, 1989; DuBois et al., 1992). However, this type of reciprocal effect is not always found (Siegel & Brown, 1988).

The problems associated with disentangling complex reciprocal linkages among correlated variables are compounded by the fact that the large majority of studies do not distinguish between different categories of daily hassles. Therefore, it is impossible to determine which types of daily experiences might play a more important role in accounting for developmental outcomes. In one exception, Daniels and Moos (1990) found that the best correlates of adolescent psychological adjustment were school stressors (such as problems with fellow students) and parent stressors (such as problems in the parents' marriage or their parenting style).

Researchers are in a much stronger position to address the possible causal relations between daily hassles and child adjustment when they attempt to identify effects associated with specific types of stressful experiences. This point is illustrated next by a discussion of three different stressful situations in childhood: *problems with peers*, *academic failure*, and *conflict between parents*. We focus on these particular situations for three reasons. First, they are common. Almost all children and adolescents will be exposed to these stressors at some point. Second, they often recur on a daily basis. Indeed, they appear on most or all measures of daily hassles. Third, growing evidence suggests that these environmental conditions are associated with important childhood outcomes. The discussion that follows emphasizes the assessment techniques and other research methods being developed in the literatures that focus on these three common stressors.

The Stress of Peer Problems

It is generally recognized that good relationships with peers are an important component of a child's healthy social and psychological adjustment. Research has shown that positive peer relationships contribute to the acquisition of social skills and the development of a positive self-concept (Asher & Coie, 1990). Poor peer relationships, on the other hand, act as chronic stressors that are associated with feelings of loneliness (Parker & Asher, 1993), and poor peer relationships may lead to serious adjustment problems in childhood and later in life (Parker & Asher, 1987).

Child development researchers distinguish between two aspects of children's experiences with peers: friendship and popularity. *Friendship* refers to children's experiences in close, one-to-one relationships with other children. *Popularity* refers to the extent to which children are more generally liked or accepted by their peer group. A child who is popular among peers might not have many close friends. Conversely, a generally unpopular child may be in a few close, one-to-one relationships with other children. Although the child development literature has focused primarily on children's popularity in peer groups, close friendships are also believed to be an important component of children's experiences with

peers (Bukowski & Hoza, 1989; Parker & Asher, 1993).

Developmental psychologists often use sociometric scales to assess classmates' reports of a child's level of social acceptance in the classroom. The rationale behind this approach is that peers are the best informants about a child's peer-group status. Data from peers may also be less biased by social desirability concerns. Two types of sociometric scales are commonly used: likability rating scales and positive and negative peer nominations. *Likability rating scales* ask children to rate the degree to which they like each of their classmates. When ratings are averaged across all children in a classroom, these scales indicate social preference, or how much any given child is liked by his or her peers. *Positive peer nomination scales* ask all of the children in a classroom to name the classmates who they consider to be their best friends. *Negative peer nomination scales* ask the children to name the classmates with whom they do not like to play. Positive and negative peer nominations assess a child's social impact, or the degree to which he or she is noticed by peers.

Based on both sociometric ratings and nominations, children are classified into five sociometric categories: popular, rejected, neglected, controversial, and average (Newcomb, Bukowski, & Pattee, 1993). A *popular* child is one who receives very high likability ratings as well as many positive peer nominations from his or her peers. A *rejected* child is one who receives very low likability ratings and many negative nominations from his or her peers. A *neglected* child is not positively or negatively nominated by his or her peers and is neither liked nor disliked. A *controversial* child is nominated by many peers and is liked by some peers and disliked by others. An *average* child is one who scores about the mean on likability and nomination scales.

Informants other than peers are also used to assess a child's level of peer-group acceptance. Children are sometimes asked to describe their own level of social acceptance in their peer group. However, children's self-reports are not always accurate. For example, research suggests that some rejected children overrate their level of social acceptance (Hymel, Bowker, & Woody, 1993; Patterson, Kupersmidt, & Griesler, 1990). Teachers are also sometimes asked to rate the extent to which children are accepted by their

peer group. Although teachers are able to identify most children who are not accepted by their peers, they are sometimes biased in their ratings. For example, teachers tend to rate children who are experiencing academic difficulties as low in peer-group acceptance (French & Waas, 1985). In order to minimize response bias, sociometric procedures are generally the preferred method in the child development literature for identifying children who are not accepted by their peers.

The use of sociometric procedures in longitudinal studies has enabled child development researchers to identify important outcomes associated with different types of sociometric categories. For example, Hymel, Rubin, Rowden, and LeMare (1990) found that children who were rejected by their peers in the second grade were more likely to exhibit externalizing problems, such as aggression, in the fifth grade. Kupersmidt and Patterson (1991) found that second-through fourth-grade girls who were neglected by their peers were at an increased risk for depression two years later. Thus, when examining long-term outcomes for children in different sociometric categories, distinctions between different types of unpopular children, such as rejected versus neglected, have proven to be important.

Rejected children may be more likely than neglected and controversial children to experience serious adjustment problems in childhood and later in life. For example, rejected children report more loneliness than do other unpopular children, such as neglected children (Asher & Wheeler, 1985). In addition, rejected children are at an increased risk for dropping out of high school, for becoming engaged in juvenile and adult crime, and for adult psychopathology (Parker & Asher, 1987).

Because rejected children appear to be at heightened risk for adjustment problems, psychologists are particularly interested in the factors that may lead children to be rejected by their peers. Many studies have been conducted examining the behavioral correlates of peer rejection. Newcomb and associates (1993) concluded, on the basis of a meta-analysis of numerous studies, that rejected children are more aggressive and withdrawn and less sociable than other children. However, the extent to which these behaviors cause children to be rejected by their peers, rather than develop as a result of peer rejection, is still unclear.

Coie and Kupersmidt (1983) employed a novel methodology to examine this question. They took unacquainted fourth-grade boys who had been classified as popular, average, neglected, or rejected according to classroom sociometrics and placed them in a free-play group for six weeks. Experimenters observed the behaviors of the children in the group setting. Social status rankings for the boys in the new setting were obtained by asking each child with whom he preferred to play in the group. Evidence of stability in the boys' social acceptance was found in the high correlation between the boys' social status rankings in the new setting and their classroom social status rankings. More important, boys who were rejected by peers in the free-play group were observed making more hostile and aversive comments and engaging in physical aggression more often than the other children. In a similar study conducted by Dodge (1983), second-grade boys who came to be rejected in experimental play groups made more hostile comments and were observed to hit other boys more than did the nonrejected boys in the group. These studies suggest that display of certain problematic behaviors, in particular verbal and physical aggression, may *cause* children to be rejected by their peers.

There is additional evidence suggesting that behavior problems may cause children to be rejected by their peers. Patterson, DeBaryshe, and Ramsey (1989) proposed a model suggesting that ineffective parenting practices result in child behavior problems, which, in turn, lead to peer rejection. Consistent with this model, Bierman and Smoot (1991) found that punitive and ineffective parental discipline was related to 6- to 10-year-old children's conduct problems at home and at school. Children's conduct problems, in turn, predicted poor peer relations at school. Dishion (1990) found that poor parenting techniques, such as the use of inconsistent and punitive behaviors, were associated with 9- and 10-year-old children's maladaptive, antisocial behaviors. Children's antisocial behaviors, in turn, were associated with rejection by peers. These studies suggest that children's behavior problems may mediate the link between poor parenting practices and peer-related difficulties.

Developmental psychologists have made important advances in the study of peer problems. The use of sociometric scales has enabled researchers to minimize problems associated with response bias as well

as identify important outcomes associated with different types of sociometric categories. For example, rejected children are more likely than neglected children to experience serious adjustment problems in childhood and later in life. As a result of these findings, child development researchers have utilized novel methodologies in order to examine the processes that may lead children to be rejected by their peers.

The Stress of Academic Failure

Academic failure, another common chronic stressor in childhood, can refer to children's actual experiences with school failure, children's perceptions of scholastic failure, or both. Children's *actual experiences* with academic failure are indicated by poor school grades or low standardized test scores. Children's *perceptions of scholastic failure* refer to children's beliefs that they are doing poorly in school. These beliefs are often measured by the cognitive competence subscale of the Perceived Competence Scale (Harter, 1982). The seven items that comprise this subscale assess how well children feel they are doing in class, how smart they think they are, how well they understand their classwork, how easy it is for them to figure out assignments, and how quickly they are able to perform academic tasks. Children's beliefs may or may not be associated with actual school failure. For example, some children earn very high grades on their report cards, yet believe they are not doing well in school (Phillips, 1987). Thus, exposure to academic failure in childhood may, for some children, refer to actual experiences with school failure. For others, it may consist entirely of a perception of scholastic failure.

Actual academic failure is associated with a variety of psychological disorders, such as attention-deficit hyperactivity disorder (ADHD), conduct disorder (Frick, Kamphaus, Lahey, Loeber, Christ, Hart, & Tannenbaum, 1991; Hinshaw, 1992), and depression (Blechman, McEnroe, Carella, & Audette, 1986). Because these findings are based on cross-sectional data, the extent to which exposure to actual academic failure actually *causes* child adjustment problems is unclear. It is certainly the case that adjustment problems in childhood can cause academic difficulties. For example, distractibility, difficulty concentrating, and

lack of self-control cause many ADHD children to perform poorly in school. It is also possible that antecedent variables, such as low socioeconomic status or family adversity, cause both adjustment problems and academic failure (Hinshaw, 1992). Longitudinal investigations would help to clarify the reciprocal causal relations between actual academic failure and different child adjustment problems.

Children's perceptions of scholastic failure are also associated with psychological disorders, such as depression (Weisz, Weiss, Wasserman, & Rintoul, 1987). In addition, children's perceptions of school failure are associated with a wide range of academic difficulties, such as low expectancies for future success (Eccles, 1983; Phillips & Zimmerman, 1990), low achievement motivation (Harter, 1992), and lack of persistence in the face of challenge (Bempechat, London, & Dweck, 1991). Many investigators believe that children's perceptions of academic failure may be more powerful predictors of negative outcomes than are children's actual experiences with school failure. For example, students' interpretations of their academic performance are more powerful predictors of negative affective reactions to achievement than are objective indicators of school performance (Meece, Wigfield, & Eccles, 1990). Thus, although actual experiences with school failure are believed to be important, the focus here will be on *perceptions* of scholastic failure as a common chronic stressor in childhood.

Child development researchers have begun to use prospective longitudinal designs in order to examine causal relationships between perceptions of academic inability and negative achievement outcomes. For example, Meece, Wigfield, and Eccles (1990) found that seventh- through ninth-grade children who held negative perceptions of their abilities in the first year of the study had lower expectancies for success in math, believed that being good in math was not important, and were more anxious about math one year later. These findings suggest that children's perceptions of scholastic inability may lead to a set of attitudes that could impede future achievement.

Factors That Influence Children's Perceptions of Academic Failure

Because children's perceptions of academic inability appear to be powerful predictors of important child

outcomes, child development researchers have investigated the factors that cause some children to perceive academic failure in their lives. Not surprisingly, parents seem to play a central role in shaping their children's perceptions of their scholastic competence. For example, Parsons, Adler, and Kaczala (1982) found that parents' perceptions of and expectations for their fifth- through eleventh-grade children were related to the children's self-perceptions of ability. The investigators assessed parents' beliefs about their children's math abilities and parents' perceptions of how difficult math is for their children. Parents' beliefs and perceptions were more directly related to children's self-perceptions of math ability than were the children's actual grades in math. Parents who thought math was hard for their children and who thought their children were not good at math had children who saw themselves as less academically competent, who believed math was difficult, and who had low expectations for future success in math.

Phillips (1987) also believes that parents contribute to children's perceptions of their academic competence. Among highly competent third-grade children, Phillips (1987) found that parents' perceptions of their children's academic competence were more predictive of children's self-perceptions than were actual indicators of performance such as grades and test scores. According to Phillips, parents use their interpretations of objective information, such as grades or test scores, to provide feedback to their children about *their performance*. Children, in turn, use this information to construct their self-perceptions. Consistent with this hypothesis, McGrath and Repetti (1995) found that parents' satisfaction with their fourth-grade children's school performance, independent of their children's actual school performance, correlated positively with children's self-perceptions of academic competence.

Teachers and peers may also exert a substantial influence on children's self-perceptions of ability. For example, teachers' use of both praise and criticism in the classroom has been found to be associated with fifth- through ninth-grade boys' perceptions of their academic abilities (Parsons, Kaczala, & Meece, 1982). Phillips (1984) similarly reported that fifth-grade children who believed they were less competent had teachers who expected lower levels of perfor-

mance from them. In a separate analysis it was found that these children accurately perceived their teachers' low expectations. In another study, fourth-graders whose teachers and peers evaluated their scholastic competence negatively near the start of the year saw themselves as less academically able at the end of the school year than at the beginning of the school year (Cole, 1991). Interestingly, although both teachers' and peers' evaluations were important, Cole found that peers' evaluations were even more predictive of changes in children's self-perceptions than were teachers' evaluations.

Although it is still unclear whether exposure to *actual* academic failure causes child adjustment problems, through use of prospective longitudinal designs child development researchers have been able to demonstrate that children's *perceptions* of scholastic failure lead to negative achievement outcomes. Parents, teachers, and peers may each play a role in shaping children's perceptions of their academic competence.

The Stress of Exposure to Interparental Conflict

In addition to the work done on peer rejection and perceived academic failure, a large body of research demonstrates that exposure to overt interparental conflict is associated with an increased risk for a wide variety of child emotional and behavioral problems. The problems range from aggression, conduct disorder, and delinquency or antisocial behavior to anxiety and depression (e.g., Emery, 1982, 1988; Grych & Fincham, 1990; Reid & Crisafulli, 1990). An understanding of the processes that account for the association of interparental conflict with child behavioral and emotional outcomes is beginning to emerge.

Most marital researchers working in this area ask parents to describe the level of conflict in their marriage and then link their descriptions to ratings of child mental health. A clear advantage to this method is that parents are obviously the best observers of their marriage. However, they may not always know the extent to which their child is aware of conflict between them (Grych, Seid, & Fincham, 1992). For example, parents may believe they are sparing their child by waiting to argue until he or she has gone outside to play or has gone to sleep for the night, not realizing that the child has come back inside the house or

has not yet fallen asleep. Thus, most researchers in this area believe that the child's own perception of marital conflict is critical to understanding how child outcomes are associated with marital conflict.

To address this issue, Grych and colleagues (1992) compared the Children's Perception of Interparental Conflict Inventory (CPIC) to the commonly used O'Leary-Porter Scale (OPS). The CPIC assesses children's awareness of and feelings about conflict between their parents; the OPS measures the parents' perceptions of how frequently marital conflict occurs in front of the children. Although ratings from the two conflict measures did not differ significantly from each other, children's perceptions of conflict consistently predicted child behavior problems as measured by parents, teachers, peers, and children better than did parents' perceptions of conflict.

In addition to interparental conflict, expressions of anger among other family members, such as between parents and children or between siblings, also appear to be related to child adjustment outcomes. For example, Jaycox and Repetti (1993) found that a child's well-being was more strongly related to the overall level of conflict within his or her family than to the degree of conflict in the parents' marriage. However, in another study, children reported greater sadness and anger after viewing a videotape of a verbal argument between two adults, compared to viewing an argument between an adult and a child (El-Sheikh & Cheskes, 1995).

Researchers have noted that, although conflict is generally equated with anger, conflicts may actually vary on several dimensions (Cummings & El-Sheikh, 1991). For example, in one family, a conflict may occur as a calm discussion between two parents in a private setting, whereas in another family, it may be a verbally hostile argument. In yet another family, the parents may engage in physical violence (Grych & Fincham, 1993). Some parents may communicate their anger nonverbally (e.g., giving the cold shoulder), verbally (e.g., yelling or insulting), or physically (e.g., pushing, slapping, or beating) (Cummings & El-Sheikh, 1991). Thus, anger within a marital relationship inherently involves some sort of conflict between the parents, whereas marital conflict does not necessarily involve anger. Marital researchers are currently investigating whether it is the anger underlying certain expressions of interparental conflict, and not the

conflict per se, that leads to problems in adjustment for children.

Cummings (1987) and colleagues have provided evidence suggesting that children do experience background anger as a stressor. In this program of research, *background anger* was defined as anger between two adults that a child only observed, without any direct participation. In one study, mothers were trained to observe their toddlers' affect at home over a period of nine months. During times when the toddlers were exposed to naturally occurring background anger, they appeared more angry and distressed (Cummings, Zahn-Waxler, & Radke-Yarrow, 1981). In another study, ratings from 4- and 5-year-old children indicated that viewing live simulations of angry adult interactions elicited more negative emotions than did viewing affectionate adult interactions (Cummings, 1987). There is also evidence indicating that preschoolers respond physiologically through changes in heart rate and blood pressure when exposed to videotapes of angry adult interactions. Moreover, not only are these changes distinct from responses to friendly interactions, but changes in heart rate correlate with self-reported distress, as well as with observed behavioral and affective distress (El-Sheikh, Cummings, & Goetsch, 1989).

Cummings and colleagues have suggested that the *occurrence* of angry interparental conflict in itself is not as important as the *intensity* or *outcome* of the angry conflict (Cummings, Vogel, Cummings, & El-Sheikh, 1989). They found that as the intensity of anger between two adult actors increased (i.e., from nonverbal to verbal to physical), children reported more anger, sadness, and fear. Children in a more recent study also reported feeling more fearful while watching videotapes of physical conflicts between two adults than they did during tapes of verbal conflicts (El-Sheikh & Cheskes, 1995).

Interestingly, there was also an interaction between the child's age and the intensity of anger expressed between the conflicting adults in one of the studies, whereby older children were more sensitive to nonverbal adult anger than were younger children (Cummings et al., 1989). In addition, if the adults did not resolve the anger, then the children experienced more negative feelings. In a follow-up study, not only were 4- to 9-year-old children upset by unresolved anger, but older children (the 6- to 9-year-olds in the

sample) could distinguish among different degrees of conflict resolution (Cummings et al., 1989). Recent findings also suggest that children prefer complete resolutions over incomplete resolutions of adult conflicts (El-Sheikh & Cheskes, 1995).

Expanding on this research, Grych and Fincham (1993) investigated the *content* of parent arguments. Children listened to an audiotape of two adult actors arguing, and responded to questions as though they were "Chris," the couple's child. Children heard two types of arguments. In the first type of argument, the parents argued about a child-related topic, such as what time Chris was supposed to do homework or which one of the parents would take Chris to an activity. In the second type of argument, the parents argued about a nonchild-related topic, such as financial concerns or the husband's work schedule. When children listened to parents engaging in child-related conflict, they experienced greater shame, self-blame, and fear of becoming drawn into the conflict than when they listened to parents engaged in nonchild-related conflict.

In a follow-up study, Grych and Fincham (1993) demonstrated that if the parents in a child-related conflict absolved Chris from blame for the argument, the children later reported less shame, fear of involvement, and self-blame than did those who heard the parents blame Chris for the same argument. Children's different reactions to the content of interparental conflict implies that child-related conflict may play a greater role than does nonchild-related conflict in children's self-conscious emotions.

These studies illustrate some important methodological advances. First, through the use of multiple observers and experimental designs, these researchers have reduced the risk of artificially inflating correlations between ratings of conflict and child adjustment, thereby strengthening confidence in their findings. Second, because they focus specifically on interparental conflict, they have been able to identify critical dimensions of conflict, such as the intensity of expressed anger, the degree of conflict resolution, and the content of the conflict (i.e., whether it was about the child). These investigators have also begun to uncover developmental changes in children's sensitivity to angry adult conflict. Without the specific focus on interparental conflict, the discovery of such important differences would have been lost.

Conclusion

All three of the research literatures discussed here suggest some powerful alternatives to self-report techniques for assessing chronic daily stressors in childhood. Some examples are peer sociometric ratings to assess a child's level of social acceptance at school, simulated conflicts between adults, and naturalistic observations in the home. This is not to argue that child reports of stressors are not of unique value. In fact, a careful distinction between child perceptions and more objective indicators of one common stressor, academic failure, leads to the conclusion that perceptions may be more critical than reality. The point to be made here is that some of the assessment techniques developed in other fields can provide stress-and-coping researchers with rich information that would be impossible to obtain with self-report data alone. For example, many investigators seem to believe that it is difficult, or impossible, for children to accurately describe their exposure to daily stressors before they near their adolescent years. Therefore, another result of an almost exclusive reliance on self-report measures has been a focus on adolescents, with little attention paid to the daily experiences of younger children. Yet, the research reviewed shows that there is much that can be learned about the effects that common daily stressors have on the well-being of young children.

Although these approaches can be much more complex and expensive to use, they ultimately suggest more differentiated and informative stress-and-coping models. Two examples illustrate how, by concentrating on a single chronic stressor, researchers have been able to identify the significant dimensions of a stressor and link those dimensions in a much more precise way with child characteristics and outcomes. In the case of chronic problems with peers, distinctions between different types of unpopular children suggest that, whereas rejected children are more likely to exhibit aggressive behavior, neglected children may be at an increased risk for becoming depressed. Similarly, other research indicates that a child's exposure to interparental discord needs to be understood in terms of the content of parent arguments, the intensity of the anger that is expressed by the parents, and the manner in which the conflicts are resolved.

Perhaps most important, the preceding research strategies seem to bring one much closer to empirically validated process models. Findings from these literatures are beginning to disentangle the complex web of causal relations that connect chronic stressors to child adjustment outcomes. For example, evidence suggests that behavior problems, especially the display of hostile and aggressive behaviors, increase the likelihood that a child will be rejected by his or her peers. Another example is a line of research investigating factors that contribute to children's perceptions of their academic competence. Researchers now know that certain parental attitudes, beliefs, and expectations help to shape at least one common stressor in childhood, the perception that one is unsuccessful in school. The most informative strategies appear to be those that focus on a single type of stressor that is studied either within an experimental context or as part of a prospective longitudinal study that includes multiple measures (including nonchild-report techniques). However, even with sophisticated research designs, one's understanding of daily stressors and their effects is incomplete without a consideration of how individual children and adolescents differ from each other in their responses to the same stressful situation. Within the health psychology literature, these individual differences are usually studied in terms of coping style.

COPING WITH DAILY STRESSORS IN CHILDHOOD AND ADOLESCENCE

The Conceptualization and Measurement of Coping in the Child Stress-and-Coping Literature

Coping in childhood is typically conceived in the stress-and-coping field as a purposeful or effortful response to a stressful event (Compas, 1987). The different strategies that children use to cope with common stressful events are often discussed in terms of a theoretical model suggested by Lazarus and Folkman (1984). According to their model, *problem-focused coping* includes strategies that attempt to manage or change the source of the problem. These can include thinking about the problem and considering alternative solutions, as well as acting to change the situa-

tion, such as seeking the help of others or studying more in order to improve grades. *Emotion-focused coping* refers to efforts to regulate emotional responses to the stressor. For example, seeking emotional support from friends and ignoring or denying the problem are two emotion-focused strategies that a child may use to cope with a household in which parents are frequently angry and openly argue with one another. A similar theoretical system that distinguishes between primary and secondary control has been proposed by Band and Weisz (1988). Here the emphasis is on the goals that underlie a coping behavior. *Primary control coping* is aimed at changing or influencing objective conditions or events, such as by yelling at a friend who took something from you. *Secondary control coping* is aimed at maximizing one's goodness of fit with conditions as they are, such as trying to feel less upset about a problem with peers.

Given the almost universal definition of coping as a conscious, intentional reaction to a recognized stressor, it is not surprising that, with few exceptions, self-report measures of coping are the norm in the child stress-and-coping literature. In this tradition, children and adolescents are asked to describe the strategies that they have used or that they would use to deal with stressful situations. All of the studies described next focus on children's descriptions of how they cope with common, everyday situations.

Researchers interested in spontaneous descriptions of coping strategies can employ several means to elicit information about coping from children and adolescents. In some cases, children are presented with hypothetical scenarios, such as conflicts with peers (Dubow & Tisak, 1989) or waiting situations that entail frustration or fear (e.g., waiting for a candy bar or waiting at the doctor's office for a shot) (Altschuler & Ruble, 1989). Subjects then respond to open-ended questions about the things that one might do in that stressful situation. In other studies, the children are first asked to describe an actual stressful experience in their lives and then to describe all the ways that they could have handled that situation and/or the coping strategies that they actually used (Band & Weisz, 1988; Compas, Malcarne, & Fondacaro, 1988; Frydenberg & Lewis, 1991; Kliewer, 1991). Often, they are directed to recall specific types of stressful events, such as being in conflict with a friend or receiving a disappointing grade in school. A child may also be

asked to describe coping responses to stressful situations that have been reported by a parent (Hardy, Power, & Jaedicke, 1993).

Spontaneous descriptions of coping are typically categorized according to theoretically based dimensions, such as problem-focused and emotion-focused responses (Compas, Malcarne, & Fondacaro, 1988); approach and avoidance techniques (Altschuler & Ruble, 1989); assertive solutions and aggressive solutions (Dubow & Tisak, 1989); or primary, secondary, and relinquished control strategies (Band & Weisz, 1988). In some cases, researchers also use more fine-grained, content-based groupings (Band & Weisz, 1988; Kliewer, 1991), or code children's responses according to a combination of different theoretical dimensions (Hardy, Power, & Jaedicke, 1993).

Instead of spontaneous descriptions of coping generated by the subject, another approach to coping assessment involves the use of checklists (e.g., Hops, Lewinsohn, Andrews, & Roberts, 1990; Spirito et al., 1988). Here, the child or adolescent indicates how often he or she uses different types of coping responses, such as asking for advice, thinking of different ways to solve a problem, pretending nothing happened, going to a movie, crying, or getting angry. Some measures define stressful situations (e.g., poor grades, peer conflicts), for which the child describes his or her coping responses (Causey & Dubow, 1992). Others aim for a more global assessment of coping style by asking about how the child generally copes with "difficulties," "concerns," or "problems" (Frydenberg & Lewis, 1991; Kurdek, 1987; Patterson & McCubbin, 1987; Sandler, Tein, & West, 1994). Coping checklists are usually scored according to factor-based scales, which represent empirically generated categories of coping strategies, rather than the theoretically based systems commonly used to code responses to open-ended questions about coping.

Whether through use of checklists or open-ended questions, nearly all assessments of coping in the stress-and-coping literature rely on children's self-reports. This approach has provided researchers with rich information about how children construe stress in their environment, the kinds of responses to common stressors that they consider, and the reactions they observe in their own thoughts, emotions, and behavior. However, Repetti (1996) has pointed out that self-report techniques impose certain limitations on what

one can learn about children's coping. First, it seems unlikely that children would be aware of all the different coping strategies that they use in difficult situations. This may be especially true of emotion-focused and secondary-control coping efforts, which often involve internal cognitive and emotional processes.

Difficulties involved in recognizing coping responses are compounded by the fact that the context in which coping occurs often changes over time. In particular, children may continue to cope with distress generated by even a minor event long after the incident has occurred and the situation has changed. For example, after school has ended and a child is home for the day, he or she may still deal with the hurt and anger of being left out of a group during a class recess period. Because emotion-focused coping efforts may take place in a situation that is different from the one that caused the distress, it should not be surprising that children sometimes fail to recognize the connection between their current coping responses and the original stressful situation.

A second problem with self-report techniques in this literature is that, when they are confronted with a questionnaire or interview, children may not recall or adequately describe even those coping strategies that they did originally recognize. The most obvious coping responses may be relatively easy to recall, such as trying to study more and keep up with homework in order to improve grades. However, a child may be less likely to remember other responses, such as teasing a classmate or sibling who is succeeding in school in an effort to cope with the frustration and distress of a disappointing report card. In general, less rational and intentional responses may be relatively difficult for a child to initially recognize as coping, to recall later, and to describe, even though they were part of an effort to manage emotional distress.

A reliance on self-report data has made it difficult for researchers to provide a comprehensive description of the different coping strategies that are actually used by children in any given stressful situation. Because it therefore seems premature to draw any conclusions about which strategies are most adaptive or maladaptive for a child to use, this chapter intentionally avoids an analysis of coping along these lines. Instead, the discussion turns now to research on how children attempt to cope with the three particular situations that were discussed earlier: problems with

peers, academic failure, and interparental conflict. Once again, the focus is on promising research designs and assessment techniques that suggest some alternatives to the use of children's own reports of their coping responses in questionnaires and interviews.

Coping with Peer Problems

The use of child self-reports to assess coping with peer problems is almost universal. One exception to this trend is work by Eisenberg and colleagues in which an emotion regulation paradigm is applied to children's coping with hostility (Eisenberg, Fabes, Nyman, Bernzweig, & Pinuelas, 1994; Fabes & Eisenberg, 1992). These developmental psychologists observe free-play periods at preschools and record children's reactions to overt anger provocations (e.g., responses to being teased or hit, or having a possession taken by another child). Reactions to the provocations are coded into descriptive categories, such as attempts to retaliate or seek revenge (e.g., hitting the provocateur), attempts to actively resist or object in a nonaggressive manner (e.g., telling someone to give a toy back), venting emotions (e.g., crying or throwing a tantrum), escape or avoidance (e.g., leaving the area), or adult seeking.

The obvious advantage to this approach is its ecological validity. Children's genuine reactions to hostility during natural social interactions are directly measured, without relying on the child's recall of the event and his or her reaction to it. Interestingly, Eisenberg and associates (1994) found that descriptions of child coping that were provided by teachers and mothers were consistent with observations of children's actual reactions to anger provocations. This finding suggests that teachers and parents may be able to provide accurate information about how a child tends to cope with certain types of common events.

A daily-report methodology can also be used to study coping during the course of normal day-to-day social interactions (Repetti, 1996). In this type of study, children keep records throughout the day of both their behavior and events that have occurred to them. Changes over time in perceptions of stressful situations are then associated with changes in the child's self-reported behavior. Thus, the child is not asked to describe his or her coping in response to the stressful event. Instead, the investigator notes the

temporal connection between the report of a stressful event and a change in the child's behavior. Using this procedure, Repetti (1996) has found that perceptions of problems with peers at school are linked to a same-day increase in a child's self-reported demanding and difficult behavior at home, such as misbehaving and being loud and noisy.

These findings are consistent with Repetti's (1996) suggestion that a child's initial attempts to secure parental attention and support following a peer rejection at school can escalate into more aversive behaviors. There are several reasons why this type of escalation might take place. The child may not connect a current state of distress to a social problem that occurred earlier at school, which would make it difficult to adequately communicate his or her need for reassurance. Alternatively, the child may simply lack the language or social skills needed to directly communicate his or her need for support, and these skills may be especially deficient when the child is feeling distressed. As a result of either situation, the child may use immature or indirect bids for parental attention, such as clinging to a parent, or whining or nagging, and become frustrated if the parent fails to recognize and respond to his or her need for comfort and reassurance. Feelings of frustration and anger at home may also be fueled by lingering negative affect that was initially generated by events at school. The situation would be further inflamed by negative parent responses to the child's behavior, such as expressions of intolerance or anger and the use of discipline.

It is interesting to note that findings from the two research programs described here suggest that, whether it is hitting another child in immediate retaliation or behaving in a difficult and aversive manner with parents later on, expressions of anger and aggression may be a common child response to problems with peers. Consideration of self-report data alone would suggest that children only rarely resort to aggressive behavior as a coping strategy (Band & Weisz, 1988; Causey & Dubow, 1992).

Coping with Academic Failure

In contrast to the naturalistic approach represented in the preceding studies, some developmental psychologists use experimental research designs to observe children's responses to academic failure in the labora-

tory (Dweck & Licht, 1980). For example, in one study, children were trained to manipulate cans in order to match the configuration of an experimenter's cans. Once children learned the task, they were exposed to a failure condition in which they were given three unsolvable problems involving the cans (Bempechat, London, & Dweck, 1991). Observations of children's reactions to failure in this study and others like it suggest that children's beliefs about their academic abilities influence how they respond to failure situations.

Two types of responses have been identified. The first is exhibited by "helpless" children, who do not perceive themselves to be academically competent. When these children are exposed to difficult problems in a laboratory setting, they do not try to solve the problems. Dweck and colleagues hypothesize that children's negative beliefs about their competencies lead them to attribute failure experiences to a personal lack of ability, and that is why they simply give up when confronted with a difficult or challenging problem.

Mastery-oriented children, on the other hand, utilize problem-focused coping strategies in the face of failure. These children believe that they are academically competent and do not attribute failure to a personal lack of ability. In fact, they appear not to be concerned with the causes of their failures, and instead focus on strategies to solve difficult problems. Research has shown that such children try harder during challenging tasks. It is important to note that no differences have been found between helpless and mastery-oriented children's actual ability levels (Dinener & Dweck, 1978; Dweck & Reppucci, 1973). It seems that their beliefs about their abilities, rather than their actual abilities, influence how they respond to failure.

Children who question their abilities may also attempt to cope with academic failure by avoiding situations in which failure might occur. For example, Harter (1992) found that a child's level of perceived cognitive competence predicted his or her choice of difficulty level in a laboratory setting. Children with lower perceptions of academic competence chose easier rather than more difficult anagrams in a problem-solving task. Harter suggests that perceptions of incompetence increase a child's level of worry or anxiety about challenging academic situations. One way

to cope is by avoiding difficult problem-solving tasks in which failure might occur. Other research also indicates that self-reported perceptions of academic competence are related to preference for challenge in school activities (Boggiano, Main, & Katz, 1988). These studies, together with the work of Dweck and colleagues, suggest that children's perceptions of their academic competence may represent an important individual difference variable underlying the way that they attempt to cope with academic failure.

In the daily-report study described earlier, Repetti (1996) found that when children perceived more academic failure events at school (e.g., receiving a "bad" grade on a test or paper), they also reported both more aversive child behaviors and more aversive parent behaviors later in the evening. Moreover, the association between the children's perceptions of academic failure and negative parent responses (e.g., their reports of parental expressions of disapproval and anger) was independent of their own self-reported aversive behavior that evening. This finding suggests either that the parents were directly responding to the school failure event, or that the children were more apt to view their parents as disapproving when they believed that they had performed poorly at school. In either case, this study echoes the research pointing to the critical role that parents play in shaping children's responses to academic events. Not only do parents influence children's perceptions of their academic competence but they also may be intimately involved in their youngsters' attempts to cope with perceived failures at school.

Coping with Interparental Conflict

Marital researchers believe that, before age 5, children tend to cope with interparental conflict by managing their own emotional reaction and not attending to those around them. Around age 5, children appear to become more problem focused in their coping efforts and may try to mediate the dispute (Cummings & El-Sheikh, 1991). In the study mentioned earlier that used audiotapes of an adult couple arguing, Grych and Fincham (1993) asked children after each segment what they would do if the couple arguing was actually their own parents. Based on children's responses, the researchers identified four different ways that children cope with adult conflict.

Some children reported that they would engage in *direct intervention* by interrupting their parents while they were arguing. Other children responded that they would engage in *indirect intervention* and attempt to remove the perceived cause of conflict without becoming directly involved. For example, a child might clean up her room if she believes that is the cause of her parents' argument. In other cases, children indicated that they would cope with interparental conflict through *withdrawal* by either removing themselves from the situation or by seeking support from another family member or friend. As a fourth coping mechanism, children reported that they would *do nothing* and choose to ignore the conflict or distract themselves. This methodological approach, which elicits children's descriptions of coping in response to an immediate conflict situation, is also used in some of the studies described next. Although it relies on child self-report data, it does not require the child to recall past parental conflicts and his or her coping responses. Thus, by avoiding a retrospective design, investigators who use this strategy also avoid the problems of poor or selective recall.

Cummings (1987) supplemented child self-report data with observational data. He found that 4- and 5-year-old children responded to live simulations of anger between strangers in one of three ways. The *concerned emotional responders* were rated as more visibly distressed during the conflict and, in later reports, were most likely to indicate that they felt sad and had a desire to intervene while witnessing the dispute. The *ambivalent responders* were rated as showing both positive and negative affect during the conflict. These children reported behavioral and emotional arousal as indicated by their desire to cry and/or run away during the argument or to hit the arguing adults. They also showed increased physical and verbal aggression toward a friend in a playtime following the simulation.

Unresponsive children showed no overt behavioral or affective changes during the conflict, although they later reported that they had felt angry. When asked what they felt like doing during the conflict, these children reported a desire to use an avoidant coping strategy (i.e., they wanted to continue to play and ignore the actors). Results involving this last group of children are particularly interesting because they emphasize the importance of using mul-

tiple respondents. Had only the observers' ratings been used, the results would have indicated no change in the children's affect or behavior. Had only the children's responses been used, the results would have indicated an anger reaction. In either case alone, important information would have been lost.

In an interesting follow-up to this study, El-Sheikh and associates (1989) linked response style to physiological changes. Ambivalent responders showed the most variability in heart rate both to friendly and angry audiotaped adult interactions. Concerned emotional responders showed increased heart rate only to the angry interactions, and unresponsive children showed no significant heart rate changes either to the friendly or angry interactions.

In a recent study, children were shown segments of angry interactions between two adults and between an adult and a child (El-Sheikh & Cheskes, 1995). After each interaction, participants were asked to indicate how they had wanted to cope during the conflict by pointing to cards with either aggressive (i.e., hitting or yelling at people) or nonaggressive behavioral responses (i.e., crying, stopping the fight, leaving the room, ignoring the people, or doing nothing). The children tended to give more aggressive responses to adult-child conflicts than to adult-adult conflicts. However, their primary responses for both types of conflict were a desire to stop the fighting and a desire to leave the room.

Participants in this study were also asked how they might have lessened the actors' distress. Children endorsed two types of responses most frequently: *mediation*, in which the child attempts to stop the conflict through compromise, and *authority*, in which the child attempts to stop the conflict from a position of power (e.g., by using a directive such as "Stop that!"). Less frequently mentioned responses were *emotional support*, in which the child does not directly intervene but offers comfort by saying or doing something nice for both actors; *triangulation*, in which the child sides with or offers help to one person only; and *no involvement*, in which the child does not become involved in the conflict.

Researchers have also examined sex and age differences in children's emotional responses to adult conflicts. Young boys report more anger and aggression in response to interadult anger than do young girls. However, this sex difference appears to be less

reliable among children over the age of 9 (Cummings, Ballard, & El-Sheikh, 1991; Cummings et al., 1989; El-Sheikh et al., 1989). Interestingly, there appears to be a general developmental progression in which there is a gradual reduction in children's self-reported emotional responses to angry adult interactions with increasing age (Cummings, Ballard, & El-Sheikh, 1991; Cummings, Ballard, El-Sheikh, & Lake, 1991; El-Sheikh et al., 1989; El-Sheikh & Cheskes, 1995).

Children's coping responses to interparental conflict appear to be determined by many factors, including the intensity of the conflict, the age and sex of the child, and individual differences among children in their emotional and physiological responses to adult anger. Researchers working in this field recognize the value of children's own perceptions and include child self-reports in their investigations. However, self-report measures and correlational studies are supplemented with observational techniques and analogue experimental designs. As a result, this literature presents a more complete picture of how children respond to signs of anger and conflict between parents.

Conclusion

The alternatives to self-report strategies discussed here contribute important information to the coping literature. In particular, children may use more emotion-focused coping than they are able to report. For example, the expression of anger and aggression appears to be a much more common way of responding to daily events than one would guess from children's descriptions of their own coping. In one study, increases in child aversive behavior at home appeared to be a delayed reaction to problems with peers and academic failure experiences that had occurred earlier at school (Repetti, 1995). In another study, Cummings (1987) observed increased aggression toward a friend in a playtime that followed a simulation of an adult conflict. These data also support the notion that coping responses unfold over time, even with a change in social context.

Another example of a possibly underreported emotion-focused coping response is a withdrawal from the challenge posed by the stressor. This type of strategy has been observed in Dweck's laboratory studies of failure situations, and has also been observed in Eisenberg's naturalistic studies of anger

provocations. As suggested earlier, children may be unlikely to report responses like "giving up" because they do not recognize them as coping strategies or perhaps, when asked in an interview, they do not recall using them or are unable to describe them. Whatever the reason, the addition of new assessment techniques to the health literature should result in a more comprehensive description of the many different strategies that are used by children to cope with common daily stressors.

There also appear to be significant advantages to the study of child coping within a specified context. A focus on children's reactions to particular types of distressing situations (e.g., problems with peers at school, failure situations, or observations of conflicts between adults) makes it possible to learn much more about how children respond and attempt to cope within each context. So, for example, interrupting parents while they are arguing seems quite different from developing a strategy to solve a complex problem in a laboratory setting, even though both might be considered problem-focused coping responses. A more complete description of the process of coping within particular types of stressful situations will improve the inferences that researchers can make about what are adaptive and maladaptive coping responses within each context and about who are the most successful and unsuccessful copers. For example, distinguishing among children who are observed to be "concerned," "ambivalent," and "unresponsive" in the face of adult conflicts may ultimately reveal at least as much as do distinctions between children who generally report using more problem-focused or emotion-focused coping strategies.

FUTURE DIRECTIONS

Health psychologists and others who work within a stress-and-coping paradigm have recognized the importance of studying children's and adolescents' exposure to common psychosocial stressors and their responses to these seemingly minor events in daily life. In the long run, a youngster's experiences with events such as peer rejection, academic failure, or interparental conflict, and his or her way of reacting to them, contributes to the child's overall psychological development and adjustment. However, there remains much to be learned about stress-and-coping processes

and the role that they play in the mental and physical health of children and adolescents.

Our review suggests that the health psychology literature would be further advanced by some of the methods and approaches used in the other fields that were discussed here. In general, we recommend that global investigations of "daily stressors" be supplemented with studies that focus on specific types of stressful events or circumstances, that assessment techniques be broadened beyond the current reliance on the self-reports of children and adolescents, and that there be increased use of prospective longitudinal studies and experimental research designs in this literature.

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