Children's Coping Efforts and Coping Efficacy: Effects of Parenting, Surgency, and Effortful Control

by

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ABSTRACT

Stress responses play a central role in the development of psychopathology. Coping efforts, one subset of stress responses, have been shown to influence the relations between stress and adjustment. Although the relations between youths' coping and emotional and behavioral outcomes are well-documented, less is known about the factors that predict youths' coping. Given their importance for adaptation, understanding influences on youths' coping has important implications for developmental theories and preventive interventions. The current study examined the main and interactive effects of positive parenting and youths' temperament on youths' coping efforts and coping efficacy one year later in a sample of 192 youth aged 9-15 years when assessed initially. Data used were from the first and third waves of a four-wave, prospective, longitudinal study of families where one or both parents recently became unemployed. Positive parenting was measured with a combination of mother-report, child-report, and observational measures. Temperament was assessed with mother-report, child-report, and/or teacher-report measures. Children reported on their coping. It was hypothesized that positive parenting, effortful control, and surgency would be positively associated with active coping and coping efficacy, and negatively associated with avoidant coping. Further, it was hypothesized that the relations between positive parenting and youths' coping would be stronger for youths low in effortful control or surgency. Structural equation modeling with latent variables revealed no significant main effects of positive parenting, effortful

control, or surgency on youths' coping efforts or coping efficacy. Path analyses revealed no significant positive parenting by temperament interactions in the prediction of youths' coping efforts or coping efficacy. Several significant correlations between measures of positive parenting or surgency and youths' coping emerged. The pattern of correlations provided some support for the hypothesized relations. For example, aspects of positive parenting (e.g., maternal acceptance) and youth surgency were associated with more adaptive coping both concurrently and longitudinally, whereas an aspect of negative parenting (i.e., maternal rejection) was associated with less adaptive coping both concurrently and over time. Potential explanations of the unexpected findings and future directions for understanding the role of parenting and youths' temperament in youths' coping efforts and coping efficacy are discussed.

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Introduction

Stress responses are thought to play a central role in the development of psychopathology (Cole, Teti, Zahn-Waxler, 2003; Compas, 1998). Coping efforts are one subset of the broader domain of responses to stress (Compas, 1998) and are viewed as mediators and moderators of the relation between stress and adjustment (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). Coping efforts developed in childhood are believed to provide the foundation for coping patterns employed across the lifespan, setting children on a more or less adaptive developmental trajectory (Compas, et al.,2001). Given their importance for short- and long-term adaptation, identifying influences on children's coping efforts has important implications for basic developmental theories. Also, additional knowledge of the factors that shape children's coping in at-risk populations will help to identify those children at highest risk of developing mental health problems, as well as provide information about the mechanisms through which investigators might enhance children's coping efforts.

Although the relations between children's coping and emotional and behavioral outcomes have been well-documented (see Compas et al., 2001), relatively few researchers have examined the factors that predict children's coping (Valiente, Fabes, Eisenberg, & Spinrad, 2004). Bioecological systems theory (Bronfenbrenner & Morris, 1998; 2006) suggests that proximal processes (e.g., parent-child interactions) and person characteristics (e.g., temperament) combine

to influence and shape the development of the child over time. In the study of children's adjustment more broadly, investigators have incorporated the bioecological model (e.g.,Gallagher, 2002; Stright, Gallagher, & Kelley, 2008) and have emphasized the importance of exploring the role that both intrapersonal and interpersonal factors play in the prediction of child outcomes (Rubin, Burgess, & Hastings, 2002). Although it has been hypothesized that both individual-level and family-level factors are important in the development of children's coping (e.g., Compas, 1998; Compas, Connor-Smith, & Jaser, 2004; Gomez, Holmberg, Bounds, Fullarton, & Gomez, 1999; Holahan & Moos, 1987; Kliewer, Sandler, & Wolchik, 1994), many questions remain regarding the factors that influence children's coping efforts (Compas, 1998). The current study explored the role of both child temperament and parenting in the prediction of children's coping efforts and coping efficacy in a sample of children of unemployed parents.

Children of Unemployed Parents

According to the U.S. Bureau of Labor (1992), approximately 5 million U.S. employees lose their jobs each year. For children, parental job loss often marks the beginning of a cascade of negative events and situations that increase children's exposure to stress and place them at greater risk of maladjustment (Howe, Levy, & Caplan, 2004; Price, Friedland, & Vinokur, 1998). Economic hardship is related to a range of adjustment problems in children such as

internalizing problems (Barrera et al., 2002), behavior problems at school (e.g., Bolger, Patterson, Thompson, & Kupersmidt, 1995; Mistry, Vandewater, Huston, & McLoyd, 2003), low self-esteem (e.g., Bolger et al., 1995), and low academic achievement (e.g.,Conger, Conger, & Elder, 1997; McLoyd, 1998; White 1982). Parental job loss is also associated with numerous stressors for children such as moving to a new home (Jurich, Collins, & Griffin, 1993), increased interparental conflict (Atkinson, Liem, & Liem, 1986), and increased parental mental health problems (Dooley, Catalano, & Wilson, 1994), each of which has been shown to predict negative mental health outcomes for youth (Cohen, Johnson, Struening, & Brook, 1989; Cummings & Davies, 1994a; Cummings & Davies, 1994b; Gilman, Kawachi, Fitmaurice, & Buka, 2003; Grych & Fincham, 1990; Rosenbaum et al., 1992). Given the high prevalence of parental job loss, the subsequent cascade of stressors, and the links from these stressors to adjustment problems, the study of children's responses to stress is particularly salient in this at-risk population.

Children's Coping Efforts and Coping Efficacy

There is a multitude of definitions and models of coping in the literature (e.g., Band & Weisz, 1988; Compas, Connor, Saltzman, Thomsen, & Wadsworth, 1999; Lazarus & Folkman, 1984; Skinner & Wellborn, 1997; Ebata & Moos, 1991; Eisenberg, Fabes & Guthrie, 1997). One of the most prominent definitions has been put forth by Compas and colleagues (Compas, 1998; Compas, Connor, Osowiecki, & Welch, 1997; Compas et al., 1999; Compas et al., 2001) who

described coping as one aspect of a greater set of self-regulatory processes enacted by individuals in response to stress. They defined coping as "conscious volitional efforts to regulate emotion, cognition, behavior, physiology, and the environment in response to stressful events or circumstances," (Compas et al., 2001, p.89). Although involuntary responses to stress are believed to have implications for overall self-regulation, they are excluded from this conceptualization of coping (Compas et al., 2001).

Compas and colleagues (2001) further distinguished coping efforts along the broad dimension of engagement versus disengagement (i.e., responses that are oriented toward the stressor or one's emotional reaction to it, versus responses that are oriented away from the stressor or one's emotional response). The current study focuses on active and avoidant coping efforts, two categories of coping efforts that reflect engagement and disengagement coping respectively and are frequently investigated in the literature on children's coping (e.g., Ayers, Sandler, West, & Roosa., 1996; Caples & Barrera, 2006; Kliewer, Fearnow, & Miller, 1996; Lengua, Sandler, West, Wolchik, & Curran, 1999; Sandler, Tein, Mehta, Wolchik, & Ayers, 2000; Smith et al., 2006). Active coping has been shown to be associated with lower levels of psychological symptoms (e.g., Ayers et al. 1996; Sandler, Tein, & West, 1994), whereas avoidant coping has been shown to be generally associated with higher levels of symptomatology (e.g., Ayers et al., 1996; Sandler et al., 1994). Another aspect of the coping process is coping

efficacy, or the subjective evaluation of one's ability to cause positive outcomes when faced with stressful or problematic events (Sandler et al., 2000). Although a relatively understudied construct, higher levels of coping efficacy have been shown to predict lower psychological symptoms in children (Sandler et al.; 2000; Smith et al., 2006; Zhou et al., 2008).

Parent-Child Relationships, Coping Efforts, and Coping Efficacy

Strong family relationships have been considered to be critical in maintaining well-being in the face of adversity (Luthar, 2006), and supportive, responsive parenting in particular has been consistently identified as one of the most robust predictors of resilience (Luthar & Zelazo, 2003; Masten, 2001). High-quality parenting, which includes warmth, supportiveness, positive communication, low negativity, low conflict and consistent, appropriate discipline (Wolchik, Schenck, & Sandler, 2009), may influence children's adjustment through its influence on coping efforts (e.g., Kliewer, Sandler, & Wolchik, 1994; Smith et al., 2006). Kliewer and colleagues (1994) theorized that parents contribute to the socialization of children's coping in three primary ways: coaching (i.e, direct instruction), modeling (i.e., observed parental coping), and through the family context. The family context, which includes the parent-child relationship and overall family interaction patterns (Kliewer et al., 1994), is the most frequently investigated pathway of influence. The family context, especially the parent-child relationship, has not only been identified as one of the most

important influences on children's responses to stress (Power, 2004), but also is thought to serve as the primary environment within which coping behaviors are learned, utilized, and reinforced (Compas, Worsham, & Ey, 1992; Kliewer et al., 1994; Kliewer & Lewis, 1995; Kliewer et al., 2006; Power, 2004).

One relevant implication of attachment theory (Ainsworth, 1979; Bowlby, 1969, 1973) is that when children feel secure and accepted in their relationships with their parents, they feel less threatened by stressful events (Gunnar, 2000) and are more likely to interact with their environment in an active manner. By extension, it seems reasonable to expect that children from cohesive family environments with secure, positive relationships with their parents will more frequently employ active or engagement-oriented coping efforts than will those from less supportive or hostile contexts (Kliewer & Lewis, 1995). Similarly, a structured, predictable family context may facilitate a sense of security and personal control over the environment (Boyce, Jensen, James, & Peacock, 1983), which in turn leads to more active coping (Kliewer et al., 1994). It is also possible that a consistent, predictable family environment helps children better evaluate the effectiveness of their coping efforts (Kliewer et al., 1994), facilitating the refining of their coping efforts and contributing to higher levels of coping efficacy.

Researchers have shown that warm, supportive parenting and a structured, consistent family environment are related to higher levels of adaptive coping

efforts such as approach or active coping, and lower levels of maladaptive coping efforts such avoidant coping or emotional outbursts (e.g., Herman & McHale, 1993; McKernon et al., 2001; Meesters & Muris, 2004; Power, 2004; Smith et al., 2006; Valiente, Fabes, Eisenberg, Spinrad 2004). Parental hostility and related constructs have been shown to be associated with greater use of maladaptive coping efforts (e.g., Caples & Barrera, 2006; Johnson & Pandina, 1991; Meesters & Muris, 2004; Ruchkin, Eisemann, & Hägglöf; 1999). However, the majority of research documenting relations between parenting and children's coping is cross-sectional (Power, 2004), thereby limiting the ability to make inferences about the direction of effects. The few longitudinal studies indicate that parental responsiveness and family cohesion are positively associated with problem-focused coping (McKernon et al., 2001) and that parental hostility is positively associated with maladaptive coping efforts such as using drugs or alcohol to cope and emotional outbursts (Johnson & Pandina, 1991). However, the generalizability of these studies is limited by the use of a very specific sample (i.e., children with spina bifida and matched controls; McKernon et al., 2001) or the use of a coping measure that assessed narrow dimensions of coping efforts that overlap conceptually with adjustment problems (i.e., use of drugs and alcohol to cope; emotional outbursts) (Johnson & Pandina, 1991). A recent experimental study examining the effects of intervention-induced changes in parenting on youths' coping processes found that improvements in mother-child relationship

quality were associated with higher levels of coping efficacy six months later and higher levels of coping efficacy and active coping six years later (Vélez, Wolchik, Tein, & Sandler, in press).

Temperament, Children's Coping Efforts, and Coping Efficacy

One intraindividual factor that has been hypothesized to influence children's responses to stress is temperament (Compas, Connor-Smith, & Jaser, 2004). Temperament has been conceptualized as "constitutionally based individual differences in emotional, motor, and attentional reactivity and self-regulation" (Rothbart & Ahadi, 1994) and has been implicated in children's social, emotional, and behavioral development (e.g., Cornell & Frick, 2007; Dennis, 2006; Eisenberg, Fabes, Guthrie, & Reiser, 2000; Eisenberg, Fabes, Nyman, Bernzweig, & Pinuelas, 1994; Eisenberg et al., 1997; Frick & Morris, 2004; Kimonis et al., 2006; Kochanska, 1997; Lengua, Wolchik, Sandler, & West, 2000; Rothbart & Bates, 2006; Rubin et al., 2002; Vitaro, Barker, Boivin, Brendgen, & Tremblay, 2006). Temperamental characteristics are thought to have a biological substrate, to demonstrate consistency across situations, and to be relatively stable over time (Rothbart & Ahadi, 1994; Rothbart & Bates, 2006). The current study focuses primarily on two temperamental factors: effortful control, an aspect of temperamental regulation, and surgency, an aspect of temperamental reactivity.

Effortful control reflects individual differences in attentional control and includes the ability to both voluntarily inhibit or suppress a dominant reaction and to initiate and sustain a subdominant reaction (Rothbart & Bates, 2006). Effortful control has been consistently shown to be negatively related to behavioral problems (e.g., Eisenberg et al., 2004; Eisenberg et al., 2001; Eisenberg et al., 2005; Kochanska & Knaack, 2003).

Surgency and related constructs (e.g., positive emotionality) include individual differences in smiling, laughter, and pleasure (Lengua, Wolchik, Sandler, & West, 2000; Rothbart & Bates, 2006), the degree to which an individual is actively involved with his/her environment (Derryberry, Reed, & Pilkenton-Taylor, 2003; Rothbart & Ahadi, 2004; Rothbart & Bates, 1998; 2006), and low levels of shyness (Rothbart & Bates, 2006). Traditional definitions of surgency also include measures of activity level or impulsivity (Rothbart & Bates, 2006). In the current study, surgency is defined as positive emotionality, social approach, and low shyness and withdrawal. Aspects of surgency (e.g., positive emotionality, positive affect) have been shown to be negatively related to depression (e.g., Anthony, Lonigan, Hooe, & Phillips, 2002; Lengua, Wolchik, Sandler, & West, 2000; Phillips, Lonigan, Driscoll, & Hooe, 2002) and behavior problems (Lengua, Wolchik, Sandler, & West, 2000; Rothbart & Bates, 2006). Also, surgency has been shown to predict creativity and flexibility in problem solving (Greene & Noice, 1988). In contrast, the impulsivity component of

surgency has been consistently shown to predict higher levels of externalizing behavior (Eisenberg et al., 2010; Rothbart & Bates, 2006).

It has been suggested that temperament plays a key role in the stress and coping process (Compas, 1998; Lengua et al., 1999; Strelau, 1995; 1996). Individual differences in both reactive and regulative temperamental factors such as surgency and effortful control may constrain the ability of some children to use particular coping efforts in response to stress (Compas, 1998). In general, enacting effective coping efforts can be difficult as it requires the suppression of dominant tendencies followed by the planning and execution of an often complex strategy (Derryberry, Reed, Pilkenton-Taylor, 2003). The processes involved in effortful control, such as attention focusing, attention shifting, and inhibitory control, may be integral in the planning, initiation, and maintenance of coping responses, such as seeking information or problem solving (Compas, 1998; Derryberry et al., 2003). Similarly, aspects of surgency (e.g., positive affect, low shyness, approach tendencies) may help a child maintain a more positive emotional state in reaction to stress and to be more prone to active engagement (Derryberry et al., 2003; Lengua et al., 1999; Rothbart & Ahadi, 1994). In adolescent and adult samples, positive affect has been shown to promote flexible thinking, effective problem solving, and efficient decision making (Greene & Noice, 1988; Isen & Diamond, 1989), all of which would support adaptive coping efforts such as thinking more positively about an event or problem-solving. In

contrast, children low in effortful control and/or surgency may have increased difficulty acquiring and implementing active coping efforts (Compas, 1998; Derryberry et al., 2003) and may use avoidant efforts more often than children high in effortful control or surgency. Further, difficulty shifting attention from negative to positive stimuli may lead children to underestimate their coping abilities (Derryberry et al., 2003) and, thus, have a limited sense of coping efficacy.

Few researchers have examined links between effortful control and surgency and children's coping. The limited literature provides some evidence that effortful control and surgency are associated with greater use of active coping (Lengua et al., 1999; Lengua & Long, 2002) and other forms of constructive coping in children such as behavioral coping (e.g., doing something to solve the problem; Wills, DuHamel, & Vaccaro, 1995) and a combination of problem-solving and seeking social support (e.g., Eisenberg et al., 1993). Children's attentional control has been shown to be positively related to their adaptive management of anger (Eisenberg et al., 1994), which may facilitate the use of active, adaptive coping efforts.

Parenting, Temperament, and Coping

Theorists have posited that temperamental characteristics and the caregiving environment make independent contributions to child outcomes more broadly (Rothbart, 2004; Rothbart & Bates, 2006) and investigators have noted

the importance of accounting for both temperament and parenting when examining aspects of children's self-regulation (Dennis, 2006). Despite evidence suggesting that parenting and temperament are each related to children's coping, and data suggesting that both are important factors in the prediction of children's well-being, (Rothbart & Bates, 1998; 2006), researchers have not yet examined how parenting and temperament combine to predict children's coping efforts. Given that investigations exploring the role of parenting and temperament in the prediction of children's adjustment problems have often supported an additive effects model (e.g., Kimonis, et al., 2006; Lengua & Kovacs, 2005; Lengua, et al., 2000; Vitaro et al., 2006), it seems reasonable to expect that temperamental characteristics and their interactions with their parents both affect children's coping.

The idea that temperament conveys its influence on child development in interaction with aspects of the social environment, such as parenting, has been proposed by numerous researchers (e.g., Chess & Thomas, 1986; Thomas & Chess, 1977; Rothbart & Bates, 2006) and this notion has received support in work examining social, behavioral, and emotional outcomes (e.g., Dennis, 2006; Kochanska, 1997; Morris et al., 2002; Rubin et al, 2002; Stright et al., 2008; Valiente et al., 2004; Wootton, Frick, Shelton, & Silverthorn 1997). Similarly, it has been suggested that the variability of children's coping efforts may best be explained by the interaction of temperamental factors and environmental

experiences (Derryberry et al, 2003). The findings of these studies suggest that high-quality parenting may have different effects on children's coping efforts and coping efficacy as a function of temperament. For example, children lower in effortful control may be less likely to engage in complex active coping efforts on their own (Compas, et al., 2004) and therefore may benefit more from a positive, supportive parent-child relationship and a structured, predictable family environment than children higher in effortful control. Children low in surgency may be less likely to actively engage with a novel situation or to maintain a positive emotional state in the face of stress (Derryberry et al., 2003) and therefore more positive parent-child relationships and consistent family environments may be needed to promote the use of active coping efforts and a sense of coping efficacy. In contrast, children high in surgency may be less dependent on a positive, consistent parent-child relationship to engage in active coping efforts and evaluate themselves as able to cause positive outcomes in the face of stress (i.e., high coping efficacy). To date, researchers have not explored the interaction between parenting and temperament in the prediction of children's coping efforts or coping efficacy.

Current Study

Using a longitudinal model, this study will focus on the prediction of active coping, avoidant coping, and coping efficacy by parenting (i.e., supportive parenting, consistent discipline, parental hostility) and temperament (i.e.,

surgency, effortful control). Two broad hypotheses were proposed: 1) parenting and child temperament would each predict active coping, avoidant coping, and coping efficacy (i.e., main effects); and 2) the strength of the relations between parenting and children's active coping, avoidant coping, and coping efficacy would differ as a function of child temperament (i.e., conditional or interactive model). It was proposed that although parenting and temperament both contribute to the prediction of children's coping efforts and coping efficacy, the relations between parenting and coping would be stronger for children low in surgency or effortful control. Specific hypotheses for the main effect relations are presented in Table 1. It was expected that effortful control, surgency, supportive parenting, and consistent discipline would be positively associated with active coping and coping efficacy and negatively associated with avoidant coping. In contrast, it was expected that parental hostility would be negatively associated with active coping and coping efficacy and positively associated with avoidant coping. Hypotheses for the interactive models are further described below.

Several models of interactive relations between temperament and parenting in predicting child adaptation outcomes have been proposed (e.g., Cornell & Frick, 2007; Gallagher, 2002; King & Chassin, 2004; Rothbart & Bates, 2006; Stright et al., 2008; Vitaro et al., 2006). These include but are not limited to stress-buffering interactions (i.e., positive temperamental traits buffer the individual against the negative effects of stressors; Rothbart & Bates, 2006),

heightened environmental sensitivity interactions (i.e., temperamental factors increase an individual's sensitivity or responsiveness to the environment; Belsky, 1997; Belsky & Pluess, 2009; Gallagher, 2002; Rothbart & Bates, 2006; Pluess & Belsky, 2010; Stright et al., 2008), protective but reactive interactions (i.e., at high levels of temperamental risk, the protective effects of a positive environment are lost; King & Chassin; Luthar, Cicchetti, & Becker, 2000), and vulnerable and stable interactions (i.e., at high levels of temperamental risk, environmental risk factors are irrelevant; Luthar et al., 2000; Wootton et al., 1997).

For the current study, a modified environmental sensitivity model seemed most plausible. It is reasonable to expect that the coping efforts and coping efficacy of children low in effortful control or surgency would benefit more from a positive family environment and be more vulnerable to a negative family environment than those of children high in effortful control or surgency who are more prone to active engagement, able to engage in complex tasks, and maintain positive affect. However, the environmental sensitivity hypothesis is not fully met as the current main effect hypotheses suggest that children high in effortful control or surgency would consistently demonstrate higher levels of active coping and coping efficacy and lower levels of avoidant coping than children low in effortful control or low in surgency. To fully meet the environmental sensitivity hypothesis, it would have to be expected that the same group of children would show the most adaptive coping processes under optimal environment conditions

and the least adaptive coping processes under the poorest environmental conditions (Belsky & Pluess, 2009; Pluess & Belsky, 2010). Although support has been found for both the protective but reactive and the vulnerable and stable models in the temperament and parenting literature, the studies supporting these models have focused on specific, extreme temperamental factors (e.g., callous-unemotional traits; Wootton et al., 1997) and/or have targeted clinical samples or highly specific samples (e.g., outpatient mental health clinics, Wootton et al.; children of alcoholics, King & Chassin, 2004) and thus have limited applicability to the current study. The stress-buffering model is limited in its applicability to the current study given that the constructs examined cannot readily be conceptualized as stressors (i.e., supportive parenting; consistent, appropriate discipline; surgency; effortful control).

For all interactive effects, a modified environmental sensitivity model was proposed. More specifically, it was expected that parental hostility would be negatively related to active coping and coping efficacy and positively related to avoidant coping for all children; however, it was expected that temperamentally vulnerable children (i.e., low effortful control or low surgency) would be more sensitive to the negative effects of parental hostility and thus show a stronger negative relation between parental hostility and active coping and coping efficacy, and a stronger positive relation between parental hostility and avoidant coping than children high in effortful control or surgency. Similarly, supportive

parenting and consistent discipline were expected to be more strongly related to coping efforts and coping efficacy for children who were low in effortful control or surgency (see Figure 1). In general, these hypothesized interactions indicate that although both parenting and temperament are important for all children's coping efforts and coping efficacy, the presence of supportive, consistent, or non-hostile parenting is especially important for temperamentally at-risk children. It is important to note that higher-order interactions are also possible (e.g., effortful control x surgency x support; support x discipline x surgency); however, these interactions were not tested in the current study given the power limitations imposed by the sample size.

The current study included children aged 9-14 years at the time of parental job loss, when the initial assessment occurred. Late childhood and early adolescence are periods of particular relevance in the study of children's coping for several reasons. First, the limited research on developmental changes in coping provides support for increases in the use of emotion-focused coping efforts, such as cognitive reframing, as children mature (Altshuler & Ruble, 1989; Band & Weisz, 1988; Band & Weisz 1990; Compas, Malcarne, & Fondacaro, 1988; Curry & Russ, 1985; Spivack & Shure, 1982; Wertlieb, Weigel, & Feldstein, 1987). Second, the transition to adolescence is a period of tremendous transition, marked by a "pile-up" of stress events and psychological change (Ge, Lorenz, Conger, Elder, & Simons, 1994; Larson & Ham, 1993; Petersen &

Taylor, 1980; Rudolph & Hammen, 1999; Simmons, Burgeson, Carlton-Ford, & Blyth, 1987). Simultaneous normative changes in multiple realms including pubertal development, school change, the initiation of dating, and increasingly complex social environments make the transition to adolescence a particularly vulnerable time (Ge et al., 1994; Petersen & Taylor, 1980; Simmons et al., 1987). Further, the relation between negative events and adjustment problems becomes stronger as children transition into adolescence (Larson & Ham, 1993).

The current study had a number of methodological strengths. First, the design was prospective and longitudinal. Longitudinal data provide an advantage over cross-sectional data by strengthening inferences about the directionality of effects (e.g., Farrington, 1991). Second, a well-constructed, valid, and reliable measure of coping was used (Ayers et al., 1996). The literature on children's coping has been criticized for a lack of clarity in both the conceptualization and measurement of coping, which has presented a significant barrier to both theoretical and empirical progress (Compas et al., 2001). The measure in the current study is one of few that has been noted for its methodological and theoretical rigor (Compas et al., 2001). Third, for several independent variables, multiple reporters completed the questionnaire measures and for supportive parenting and parental hostility, both questionnaire and observed measures were used. The use of multiple reporters and multiple methods reduces concerns about common method variance (Kazdin, 1998) and allows for a broader assessment of

the constructs of interest (e.g., Achenbach, McConaughy, & Howell, 1987; De Los Reyes & Kazdin, 2005), which strengthen inferences about the validity of the findings.

Method

Participants and Recruitment

The sample consisted of 192 children of unemployed parents, as well as their mothers and one or two teachers. These families are a subgroup of participants in the Children of Unemployed Parents Study (CUPS), a four-wave longitudinal investigation designed to understand the effects of parental job loss on children's adaptation outcomes and to identify the child- and family-level processes that influence children's risk for adjustment problems. Data in the current project are from the first and third waves.

Possible participants were initially identified through weekly Maryland Department of Labor and Licensing Review database searches for individuals applying for unemployment insurance benefits. Applicants were considered for recruitment if they were between the ages of 27 and 56 years, had been receiving unemployment insurance benefits for 4 weeks, did not plan to return to work within 70 days, and had zip codes or telephone exchanges matching a list that of zip codes and telephone exchanges that represented approximately 80% of the state. Of those applicants, individuals who were classified as "exhaustees" (i.e., were at risk of running out of benefits) as well as a random subset of all other applicants were contacted about participation, yielding approximately 600 weekly

contacts. Families were initially contacted through recruitment letters sent through state unemployment offices that included a study description, inclusion criteria, contact information for study personnel, and a self-addressed postcard with return postage indicating willingness to be contacted about the study. All interested families were contacted and considered for participation. Family inclusion criteria were as follows: (a) at least one parent had become unemployed within four to eighteen weeks at the time of initial participation, (b) the expected duration of their unemployment was unknown (i.e., individuals experiencing temporary lay-offs were excluded), and (c) the unemployed parent had at least one child between the ages of 8 and 15 years. If the family had more than one child who met the age criteria, a target child was randomly selected for participation. Although the sample included families where the mother, father or both were interviewed, families in which only the father participated (n = 11) were excluded in the current study.

The children ranged from 8.97 to 14.9 years with a mean age of 11.8 years (SD=1.6) at Time 1 (T1); 53.6% were female. Of the mothers, 47.9% self-identified as African-American, 42.7% self-identified as Caucasian-American, 4.7% self-identified as Latino or Hispanic, 2.6% were American Indian, Eskimo, or Aleut, 2.1% were "other" and 4.7% did not report on their race. At T1, 53.6% of children lived in two-parent households; 45.8% of children lived with single mothers. Of the mothers, 5.2% had completed less than a high school degree,

25% had completed only high school, 39.7% had taken some college courses, and 29.7% had completed college or attended graduate school.

Attrition analyses were conducted using independent samples t-tests and chi-square tests to compare families where the target child participated at Time 3 (T3)[1] (n = 147) to those where the child did not participate at T3 (n = 45) on all study variables at T1 and basic demographic information (i.e., child age, child gender, per capita income, race, family structure). A total of 27 tests was conducted. Analyses revealed significant differences in observed maternal communication, $t(178) = -3.445$, $p = .001$, and observed maternal listener responsiveness, $t(178) = -3.008$, $p = .003$, such that families where the child participated at T3 had higher baseline communication and listener responsiveness compared to those that did not participate. All other comparisons were nonsignificant.

Procedures

Prior to the interview, children gave assent and parents gave informed consent. Interviews were conducted in the family's home or in a research lab by trained interviewers; interviews lasted from 1.5 to 4 hours. For the questionnaire portion of the home or lab visit, items were read to participants. Parents and children were interviewed in separate rooms. Families were paid $10 per person per hour. Families were asked to provide the names of two teachers for the target

[1] Only the participation of the target child at T3 was required for the attrition analyses because only child-reported measures were used at T3.

child. Interviewers contacted teachers by phone, explained the study, and mailed or faxed questionnaires for completion. Teachers were paid $10 for completing the questionnaire. Seventy six (39.6 %) children received reports from two teachers, 58 (30.2%) received a report from one teacher and 58 (30.2%) did not receive a teacher report.

Observational Task.

Mother and child dyads were videotaped in a five-minute disclosure task that was followed by a 10-minute problem solving task. For the disclosure task, dyads discussed the highest rated (i.e., most threatening) stressor that occurred in the past six months and both the mother and child had previously indicated they would be willing to discuss. Stressors were identified and assigned threat ratings using the administration of the Contextual Assessment of Stressful Events in Childhood Interview (CASEC) to mothers and children. The CASEC is an adaptation of the Psychological Assessment of Childhood Experiences Revised (Sandberg, et al. 1993). Prior to the disclosure task, mothers were instructed to "find out more" about the selected stressor as they normally would, learn more about how their child saw the stressful situation and what s/he experienced while the situation or event was occurring, and determine what concerned the child most about the situation. Children were instructed to talk with their mothers about the selected stressor. In the problem-solving task, mothers and children were instructed to discuss what the child could do if the stressor reoccurred, work

together to think about how the child "might deal with this new situation and any feelings about it," and generate solutions that could make the situation better or make the child feel better.

Coding Procedures for Observational Task.

The mother-child tasks were coded using the Iowa Family Interaction Rating Scales (IFIRS), a behavioral observation system that assesses the frequency, intensity, affective tone, and proportion of specific types of behaviors during an interaction task using nine-point rating scales (IFIRS; Ge, Best, Conger, & Simons, 1996; Melby & Conger, 2001). All scales were rated using a nine-point scale. Higher scores indicate stronger evidence of behavior, or that these behaviors are more "characteristic" of the interaction. Reliability was assessed using the system developed by Melby and Conger (2001). Raters completed gold standard tapes (GS) blindly within their coding assessments on a bi-weekly basis. Approximately 20% of tapes coded were GS tapes. If reliability criteria (80% of codes had to be within a 2-point difference of the score on the GS tapes and no more than 10% could be greater than a 3-point difference) were not met at an assessment point, all tapes coded by that rater since the previous reliability assessment were considered invalid and were re-coded by another rater.

Measures of Covariates

Child gender, age, race.

Mothers reported on child gender and age. Self-reported race of the biological parents was used to determine the child's race. For single-mother families, the reported race of the biological mother was considered to be the child's race. For two-parent families, the reported race of both biological parents (i.e., mother and father) was used to determine child race. If the biological parents' race differed, the child's race was labeled "other." If the child was in a stepfamily, the race of the participating biological parent (mother or father) was considered the child's race. If neither of the child's biological parents participated, the child's race was not determined.

Family structure and Socioeconomic status (SES).

Family structure (i.e., two-parent vs. single-parent home) was based on mothers' report. SES was measured using per capita monthly income prior to unemployment; mothers reported on family size; mothers and fathers reported on their current monthly income. Income is considered a more appropriate means of measuring SES than educational achievement when considering ethnic minorities because educational achievement is differentially related to relevant outcomes (i.e., occupational status and/or income) for minority and majority individuals (Krieger, Williams, & Moss., 1997; Maxwell, 1994).

Measures of Predictors

Supportive Parenting.

Supportive parenting was measured using a combination of questionnaire and observed data. Questionnaire data included mother report (16 items) and child report (10 items) of a shortened version of the acceptance subscale of the Child Report of Parenting Behavior Inventory (CRPBI; Schaefer, 1965; child report $\alpha = .88$; mother report $\alpha = .82$). Sample items include, "Your mother understood your problems and your worries" (child report) and "You comforted this child when he/she was afraid" (mother report). All items for all questionnaire measures are presented in Appendix A. The CRPBI has been shown to discriminate normal boys from delinquents and to have adequate internal consistency (Schaefer, 1965); the acceptance subscale has been shown to have adequate test-retest reliabilities (Fogas, Wolchik, & Braver, 1987) and discriminant validity (Schaefer & Bell, 1958).

Observed data measures include the warmth, listener responsiveness, and communication subscales of the IFIRS. Warmth measures the degree to which the mother expresses liking, appreciation, praise, care, concern, and support for the child and targets three types of behavior: nonverbal communication (e.g., smiling, affectionate touching), supportiveness (e.g., showing concern for the child, offering encouragement or praise), and supportive content (e.g., making statements of affirmation, empathy, care, or concern). Listener responsiveness

assesses the degree to which the mother attends to, shows interest in, acknowledges, and validates the child's verbalizations through both nonverbal and verbal behavior (e.g., nodding, leaning toward the child, repeating or paraphrasing the child to invite continued conversation). Communication measures the degree to which the mother clearly conveys her needs, wants, rules, and regulations in a positive or neutral manner, and includes the use of explanations, clarifications, reasoning, and the demonstration of consideration of the child's point of view. The validity of the IFIRIS scales has been supported through comparisons against self and family member reports of the targeted behaviors using correlational and confirmatory factor analyses (Melby & Conger, 2001). The listener responsiveness and communication subscales have been shown to predict supportive adolescent behaviors toward peers and siblings (Cui, Conger, Bryan, & Elder, 2002) and the warmth subscale has been shown to predict children's mental health problems (Franck & Buehler, 2007). Interrater reliability was assessed using the intraclass correlation coefficient (ICC; Shrout & Fleiss, 1979) The ICCs for warmth, listener responsiveness, and communication were good (.78, .65, and .65 respectively; Cicchetti, 1994).

Consistent Discipline.

Consistent discipline was measured using mother reports (eight items) and child report (eight items) on a shortened version of the inconsistent discipline subscale of the CRPBI (Schaefer, 1965; child report α = .73, mother report α =

.81). Sample items include, "Your mother punished you for doing something one day but it ignored it the next" (child report) and "It depended on your mood whether a rule was enforced or not" (mother report). The inconsistent discipline subscale has also been shown to have adequate discriminant validity (Schaefer, 1965; Schaefer & Bell, 1958).

Parental Hostility.

Hostility was measured using both questionnaire and observed data. Questionnaire data include mother report (16 items) and child report (10 items) on a shortened version of the rejection subscale of the Child Report of Parenting Behavior Inventory (CRPBI; Schaefer, 1965; child report α = .79, mother report α = .80). Sample items include "Your mother often blew her top when you bothered her" (child report) and "You almost always complained to this child about what he/she did" (mother report). The rejection subscale of the CRPBI has been shown to have adequate internal consistency and to discriminate between normal and delinquent boys (Schaefer, 1965).

Observed hostility was assessed using the hostility subscale of IFIRS. Hostility measures the degree to which the mother displays hostile, angry, critical, disapproving or rejecting behavior toward the child. Raters coded nonverbal communication (e.g., angry facial expressions, menacing body posture), emotional expression (e.g., irritable tone, showing contempt or disgust for the child's behavior), and statement content (e.g., making complaints or critical

remarks about the child). The hostility subscale has been shown to predict behavior problems in children and adolescents (Conger, Conger, & Elder, 1994; Ge et al., 1996). The ICC for hostility was .67.

Effortful Control.

Attention. Attention was measured using child, mother, and teacher reports at T1. Children reported on the Attention subscale (seven items) of the Early Adolescent Temperament Questionnaire-Revised (EATQ-R; Ellis & Rothbart, 2001). Mothers and teachers completed the Attention subscale of the EATQ-R Parent Report Form (six items) and five items from the Attention Focusing subscale of the Children's Behavior Questionnaire (CBQ; Rothbart, Ahadi, Hershey, & Fisher, 2001). Sample items include, "I am good at keeping track of several different things that are happening around me" (child report) and "He/she finds it easy to really concentrate on a problem" (mother and teacher report). The EATQ-R attention subscale has been shown to have adequate internal consistency and is a subdimension of the EATQ-R's factor-analytically supported Effortful Control factor (Putnam, Ellis, & Rothbart, 2001). EATQ-R Effortful Control has been shown to predict adolescent problem behaviors (Ellis, Rothbart, & Posner, 2004). The CBQ has been shown to have adequate internal consistency, good temporal stability, and a consistent factor structure across cultures, and to predict relevant personality and social constructs (e.g.,

conscientiousness; Rothbart et al., 2001). Coefficient alphas were .50, .83, and .92 for child, mother, and teacher reports, respectively.

Inhibitory Control. Inhibitory control was measured using child, mother, and teacher reports at T1. Children completed the short form of the EATQ-R Inhibitory Control subscale (five items). Mothers and teachers completed the Inhibitory Control subscale of the EATQ-R Parent Report Form (five items) and four items from the Inhibitory Control subscale of the CBQ (child report $\alpha = .27$; mother report $\alpha = .73$; teacher report $\alpha = .88$). Sample items include, "I can stick with my plans and goals" (child report) and "He/she is able to stop him/herself from laughing at inappropriate times" (mother and teacher report). The EATQ-R Inhibitory Control subscale has been shown to have adequate internal consistency and is a subdimension of the EATQ-R Effortful Control factor (Putnam et al., 2001), which is predictive of adolescent problem behaviors (Ellis et al., 2004). The CBQ inhibitory control subscale has demonstrated adequate internal consistency and temporal stability, and has been shown to predict social behavior characteristics such as empathy and guilt/shame (Rothbart et al., 2001).

Surgency.

Positive Emotionality. Positive emotionality was measured using child and mother report at T1. Children and mothers reported on a shortened version (seven items) of the Positive Mood subscale of the Revised Dimensions of Temperament Survey (DOTS-R; Windle & Lerner, 1986). Sample items include

"I laugh several times a day" (child report) and "His/her mood is generally cheerful" (mother report). The DOTS-R has demonstrated adequate internal consistency, factorial validity, and predictive validity (Windle & Lerner, 1986). DOTS-R Positive Mood has been shown to be positively related to adolescent cognitive, social and physical competency and self-worth (Windle et al., 1986). Coefficient alphas were .61 and .88 for child report and mother report respectively.

Social Approach/Withdrawal. Social approach and withdrawal was measured with mother report only at T1. Mothers reported on seven items from the DOTS-R Approach-Withdrawal subscale (α = .71). Sample items include, "Takes him/her no time at all to get used to new people" and "Usually moves towards new objects shown to him/her." The DOTS-R social approach/withdrawal subscale has adequate internal consistency and predictive validity (Windle & Lerner, 1986), and has been shown to predict adolescent cognitive competency and self-worth (Windle et al., 1986)

Shyness. Shyness was measured using child and mother reports at T1. Children reported on the short form of the EATQ-R Shyness subscale (four items); mothers reported the Shyness subscale (five items) EATQ-R Parent Report Form (child report α = .75; mother report α = .81). Sample items include "I feel shy about meeting new people" (child report) and "He/she likes meeting new people" (mother report). EATQ-R shyness has been shown to have adequate

internal consistency; low shyness is a subdimension of the EATQ-R Surgency factor (Ellis & Rothart, 2001; Putnam et al., 2001,) which has been shown to predict children's mental health problems (e.g., Oldehinkel, Hartment, De Winter, Veenstra, & Ormel, 2004).

Measures of Outcomes

Active Coping.

Active coping was measured with child report using a revised version (12 items) of the Children's Coping Strategies Checklist (CCSC; Ayers et al., 1996) at T1 and T3. Sample items include "You thought about which things are best to do to handle the problem" and "You reminded yourself about all the things you have going for you." Active coping has been shown to predict children's mental health problems (Sandler, Tein, & West 1994). Coefficient alphas of the revised active coping scale were .86 in the current sample at T1 and T3.

Avoidant Coping.

Avoidant coping was measured with the avoidant coping subscale (12 items) of the CCSC using child report at T1 and T3. Avoidant coping consists of three subdimensions, Avoidant Actions, Wishful Thinking, and Repression, and has been shown to be positively related to children's mental health problems (Sandler et al., 1994). Sample items include, "You tried to put it out of your mind" and "You avoided the people who made you feel bad." Coefficient alphas were .79 and .82 at T1 and T3, respectively in the current sample.

Coping Efficacy.

Coping efficacy was measured with child report on the eight-item Coping Efficacy Scale at T1 and T3 (Sandler, Tein, & Ayers, 1996). This scale has been shown to have a one-dimensional factor structure and to be negatively related to children's mental health problems (Sandler, Tein, Mehta, Wolchik, & Ayers, 2000). Sample items include, "How well do you think that the things you did worked to make you feel better?" and "In the future, how good do you think that you will usually be in handling your problems?" The coefficient alphas in the current sample were .77 at T1 and .72 at T3.

Data Analytic Plan

Data analyses were conducted in five major stages. First, screening for outliers was conducted in the regression framework using a series of procedures to determine whether any cases needed to be removed from the analyses due to excessive influence. Second, several data reduction procedures were employed to reduce the overall number of variables used (e.g., correlations were examined to identify variables that could be appropriately combined). Third, a measurement model was created using Structural Equation Modeling (SEM) approaches with MPlus software (Version 5.21, Muthén & Muthén, 2007). More specifically, confirmatory factor analysis (CFA) was used to create latent variables to serve as predictor variables in subsequent models. The use of latent variables provides an advantage over the use of observed variables as it reduces the dimensionality of

data by aggregating multiple observed variables into single latent variables representing the underlying constructs of interest, and it allows for better control of the biasing effects of multiple predictors measured with error (Bollen, 1989). Fourth, SEM with latent variables was used to test the main effect hypotheses detailed in Table 1. Main effects were tested separately for each of the three coping outcome variables (i.e., active coping, avoidant coping, coping efficacy) yielding a total of three, two-wave prospective main effects models. Finally, the interactive hypotheses were tested using observed composite predictor variables in a path analytic framework. A path analytic approach was used to test for interactive effects rather than a two-group approach because the two-group approach requires the dichotomization of continuous variables. Dichotomization of continuous variables can lead to decreased measured relations between variables, reduced power to detect interactions, and in some cases to spurious interactive effects (Cohen, Cohen, West, & Aiken, 2003). Observed rather than latent variables were used because the current sample size is insufficient to support analyses involving latent interactions (R. Millsap, personal communication, July 22, 2010). Interactive effects models were tested separately for each coping outcome variable (i.e., active coping, avoidant coping, coping efficacy) and for each moderator (i.e., effortful control, surgency) yielding six, two-wave prospective interactive effects models. Further details on procedures and models are presented below.

For all models, the MPlus feature for Maximum Likelihood Estimation with missing data (MLE) was used to account for missing scale scores. MLE procedures directly estimate the parameter values of interest that best fit all the available raw data, and have been shown to be superior to traditional missing data techniques (e.g., Muthén, Kaplan, & Hollis, 1987). Due to the presence of non-normal variables, Maximum Likelihood Robust (MLR) procedures were also used; MLR procedures use the same approach as MLE to account for missing scale scores, but provide standard errors and chi-square statistics for non-normal data (see Muthén & Muthén, 1998-2007). Models using MLE and MLR were compared; if the models differed substantially in terms of significance level or directionality of paths, the model using MLR is presented. If the models did not substantially differ, the model using the standard estimator (MLE) was presented.

Results

Preliminary Analyses

Descriptive data including means, standard deviations, actual minimum, actual maximum, skew, and kurtosis for all demographic and primary study variables are presented in Table 2.

Outlier analysis. Variables were assessed for outliers and non-normality. Non-normality was determined by measures of skewness and kurtosis (i.e., skewness $\geq$ 2; kurtosis $\geq$ 7; West, Finch, & Curran, 1995). Mother-reported rejection met the cut-off (skew = 2.08) and observed hostility approached the cut-

off (skew = 1.99) for non-normality (see Table 2). As described above, non-normality was addressed by re-testing with MLR and comparing these results to models tested with the standard estimator.

Screening for outliers was conducted in the regression framework using a series of steps. First, the Variance Inflation Factor was examined using a cut-off of 10 (Cohen, Cohen, West & Aiken, 2003); no values approached 10. Next, Difference in Fits (DFFITS) was used as a global measure of influence to determine how cases affect the overall characteristics of the regression model. Cohen et al.'s (2003) guidelines were used which suggest that cases with DFFITS greater than or equal to one are selected for further analysis with Difference in Betas (DFBETAS). No cases had DFFITS greater than or equal to one. Finally, Cook's Distance was estimated using a cutoff of one (Cook, 1977; Stevens, 1984); no cases reached this cut-off. Thus, all cases were retained in the analyses.

Data Reduction.

Observational Data. To reduce the number of variables used in the SEM models while still retaining a broad picture of maternal behavior across the two tasks, scores for each observed measure (i.e., warmth, listener responsiveness, communication, hostility) were averaged across the two tasks to create a single score for each of the four measures. Correlations between scores on the tasks were small to large in size: warmth, $r(177) = .28$, $p < .001$; listener responsiveness, $r(177) = .50$, $p < .001$; communication, $r(177) = .42$, $p < .001$;

hostility, $r(177) = .50$, $p < .001$. Next, correlations between the three observed measures of supportive parenting (i.e., warmth, listener responsiveness, communication) were computed to determine whether any of these conceptually-related measures could be combined. Based on the correlation between listener responsiveness and communication, $r(178) = .75$, $p < .001$, these two measures were combined by creating an average score. The correlations between warmth and listener responsiveness and between warmth and communication were modest, $r(177) = .23$, $p = .002$ and .25, $p = .001$, respectively.

Temperament. To reduce the number of temperament variables used in the SEM models, a series of steps were used. First, child-reported attention and child-reported inhibitory control were excluded due to low alpha values: attention, $\alpha = .50$, inhibitory control $\alpha = .27$. Second, correlations between the remaining indicators of effortful control and surgency were examined to determine if any indicators could be combined within reporter (e.g., teacher-reported attention and inhibitory control) or within construct (e.g., mother-reported attention and teacher-reported attention). Correlations were generally larger within reporter than within construct (see Table 5). Thus, the measures within reporter were combined for each construct: mother-reported effortful control (i.e., composite of mother-reported attention and inhibitory control, $r(189) = .69$, $p < .001$), teacher-reported effortful control (i.e., composite of teacher-reported attention and inhibitory control, $r(131) = .81$, $p < .001$), mother-reported surgency (i.e.,

composite of mother-reported social approach/withdrawal, shyness, and positive emotionality: social approach/withdrawal and shyness, $r(180) = -.72$, $p < .001$, social approach/withdrawal and positive emotionality, $r(189) = .60$, $p < .001$, shyness and positive emotionality, $r(189) = -.50$, $p < .001$), and child-reported surgency (i.e., composite of child-reported positive emotionality and shyness, $r(189) = -.16$, $p = .025$. Although the correlation between child-reported positive emotionality and shyness was small, these scales were combined within reporter for consistency in data reduction approaches across temperament constructs, and to reduce the number of temperament variables used. For both mother- and child-reported shyness, the scales were reverse scored such that higher scores indicated lower levels of shyness.

Correlations. Correlations between all primary study variables following data reduction procedures are presented in Table 3.

Parenting Variables. The majority of correlations between measures of the same construct were significant, in the expected direction, and small to medium in size. In terms of support, child-reported acceptance was significantly positively correlated with all other indicators of support: mother-reported acceptance, $r(187) = .33$, $p < .001$, observed warmth, $r(178) = .15$, $p = .046$, and observed listener responsiveness/communication, $r(178) = .15$, $p = .022$. In addition to being significantly positively related to child-reported acceptance, mother-reported acceptance was significantly positively correlated with observed

listener responsiveness/communication, $r(177) = .18$, $p = .014$, and marginally related to observed warmth, $r(177) = .14$, $p = .059$. Observed listener/communication and observed warmth were also significantly positively correlated, $r(178) = .26$, $p = .001$.

In terms of consistent discipline, child- and mother-reported consistent discipline were significantly positively correlated, $r(188) = .28$, $p < .001$. Similarly, child- and mother-reported rejection were significantly positively related, $r(188) = .30$, $p < .001$. Neither child- nor mother-reported rejection was significantly related to observed hostility.

Temperament Variables. In terms of correlations between the temperament measures, child and mother reports of surgency were moderately positively correlated, $r(188) = .34$, $p < .001$, as were mother and teacher reports of effortful control, $r(123) = .46$, $p < .001$. Across temperament constructs, only one significant correlation emerged: mother-reported surgency with mother-reported effortful control, $r(189) = .22$, $p = .002$.

Coping Variables. At T1, the correlations between active coping and avoidant coping, $r(190) = .47$, $p < .001$, and between active coping and coping efficacy, $r(190) = .52$, $p < .001$, were moderate and large in size, respectively. Avoidant coping and coping efficacy were not significantly related. Similarly at T3, the correlations between active coping and avoidant coping, $r(145) = .40$, $p < .001$, and between active coping and coping efficacy, $r(145) = .45$, $p < .001$, were

moderate in size. The correlation between avoidant coping and coping efficacy was nonsignificant. The correlations between T1 coping variables and T3 coping variables were moderate to large indicating substantial stability over time: T1 and T3 active coping, $r(145) = .53$, $p < .001$, T1 and T3 avoidant coping, $r(145) = .38$, $p < .001$, and T1 and T3 coping efficacy, $r(145) = .53$, $p < .001$.

Coping, parenting, and temperament. In terms of correlations between the parenting variables and coping variables at T1, a few significant relations emerged. Child-reported acceptance was significantly positively correlated with active coping, $r(190) = .27$, $p < .001$, and coping efficacy, $r(190) = .38$, $p < .001$. Child-reported rejection was significantly positively related to avoidant coping, $r(190) = .15$, $p = .043$, and significantly negatively related to coping efficacy, $r(190) = -.22$, $p = .002$. Child-reported discipline was significantly negatively correlated with avoidant coping, $r(190) = -.17$, $p = .021$. *Mother*-reported acceptance was significantly positively correlated with coping efficacy, $r(187) = .17$, $p = .020$. All other correlations between parenting variables and T1 coping variables were nonsignificant. In terms of the relations between the temperament variables and coping variables at T1, child-reported surgency was positively significantly correlated with active coping, $r(189) = .20$, $p = .007$, and coping efficacy, $r(189) = .28$ $p < .001$. The other relations between the temperament variables and coping variables at T1 were nonsignificant.

In terms of correlations between the parenting variables at T1 and coping variables at T3, a few significant relations emerged. Correlations between child-reported acceptance and active coping, $r(145) = .26$, $p < .001$, and both mother- and child-reported acceptance and coping efficacy were significant: mother report, $r(143) = .23$, $p = .01$, child report, $r(145) = .31$, $p < .001$. Child-reported rejection was significantly positively related to avoidant coping, $r(145) = .26$, $p = < .001$, and both mother- and child- reported rejection were significantly negatively correlated with coping efficacy: mother report, $r(143) = -.18$, $p = .03$, child report, $r(145) = -.21$, $p = .01$. Observed listener responsiveness/communication was also significantly positively related to coping efficacy, $r(134) = .18$, $p = .04$. All other correlations between parenting variables and the T3 coping variables were nonsignificant. In terms of relations between the temperament variables (i.e., mother-reported effortful control, teacher-reported effortful control; mother-reported surgency, child-reported surgency) and the T3 coping variables, only one significant relation emerged; child-reported surgency was significantly positively correlated with active coping, $r(144) = .17$, $p = .02$.

Covariates. Correlations between the potential covariates [i.e., age, gender, race, per capita income and family structure (single-parent vs. two-parent home)] and the three T3 coping variables are presented in Table 4. These variables were selected for consideration as there is some evidence to suggest that

coping strategies may vary according to age (e.g., Band & Weisz, 1988), gender (e.g., Herman & McHale, 1993; Santiago & Wadsworth, 2009), race (e.g., Hill, Hawkins, Raposo, & Carr, 1995; Rasmussen, Aber, & Bhana, 2004), income (e.g., Hill et al., 1995; Wadsworth & Compas, 2002), and family structure (e.g., Irion, Coon, & Blanchard-Fields, 1988). Covariates were selected for inclusion in the initial models if they were significantly related to one or more of the outcome variables (i.e., T3 coping variables). Race and per capita income were significantly correlated with T3 avoidant coping; children from families with higher per capita income and Caucasian-American children reported lower levels of avoidant coping: race, $r(132) = .24$, $p = .006$ per capita income, $r(138) = -.22$, $p = .010$. None of the potential covariates was significantly related to T3 active coping or T3 coping efficacy.

Primary Analyses

Measurement Model. Five latent variables were constructed in the initial measurement model: Support, Consistent Discipline, Hostility, Effortful Control, and Surgency. Indicators for each of these variables are presented in Table 6. Error variances of all indicators by the same reporter or the same method (i.e., observed data) were initially permitted to correlate (Cole & Maxwell, 2003); only significant correlations were retained (see Figure 2). Overall fit for this measurement model was adequate, $\chi^2(49) = 69.787$, $p = .027$, CFI = 0.96, RMSEA = .05, SRMR = .06. As shown in Table 7, all the correlations between

the five latent variables were medium to large, with the exception of the correlation between surgency and effortful control, $r = .11$, $p = .467$.

Although the measurement model yielded adequate fit, once the main effects were added to the model (i.e., paths from support, consistent discipline, hostility, effortful control, and surgency to the coping variables), MPlus could not converge on a solution. It was hypothesized that the inability of the model to converge was due to the collinearity between the latent variables as evidenced by the medium to large correlations between them (see Table 7). To address these high correlations, a series of steps was taken. First, because support and hostility were the most highly correlated latent variables, $r = -.88$, $p < .001$, the indicators of these variables were used to create a single latent variable. This approach yielded a four latent factor model (i.e., support plus hostility, discipline, effortful control, surgency). Although the measurement model fit was adequate, $\chi^2(53) = 73.212$, $p = .034$, CFI = 0.96, RMSEA = .05, SRMR = .06, MPlus could not generate a solution once the main effects were added.

A second-order factor model approach was then tested that utilized the five original latent factors (i.e., support, hostility, discipline, effortful control, surgency) and a second-order "positive parenting" factor to better capture and model the high correlations between the parenting latent variables. The second-order factor used the support, hostility, and discipline latent variables as indicators. This model yielded good fit, $\chi^2(51) = 58.43$, $p = .22$, CFI = 0.98,

RMSEA = .03, SRMR = .06, but the model would not converge once the main effects were added.

A fourth model was tested in which all parenting indicators were loaded on a single, first-order positive parenting factor. To reduce the number of indicators used to create the positive parenting factors, the following variables were combined due to their conceptual overlap and significant correlations: mother-reported acceptance and rejection, $r(187) = -.35$, $p < .001$, and child-reported acceptance and rejection, $r\ (190) = -.55$, $p < .001$. Rejection was reverse scored prior to averaging. This approach yielded a model with three latent factors: positive parenting (i.e., mother-reported acceptance/rejection, child-reported acceptance/rejection, observed warmth, observed listener responsiveness/communication, observed hostility, mother-reported consistent discipline, child-reported consistent discipline), effortful control, and surgency. Although this model yielded adequate fit, $\chi^2(36) = 53.995$, $p = .027$, CFI = 0.95, RMSEA = .05, SRMR = .05, the theta matrix (i.e., residual covariance matrix) was not positive definite once the main effects were added. Error messages generated by MPlus indicated that the source of the error was child-reported surgency.

As a final step, this model was re-run without child-reported surgency yielding a model with two latent variable predictors (i.e., positive parenting, effortful control) and a manifest mother-report variable for surgency (see Figure

3). The fit of this model was good $\chi^2(22) = 28.143$, $p = .17$, CFI = 0.98, RMSEA = .038, SRMR = .05, and MPlus successfully generated a solution when the main effects were added. The final measurement model was tested with and without the MLR estimator; all paths were in the same direction at the same significance level regardless of the estimator used. The results from the standard estimator are presented.

Main Effects Models. As described above, the main effect hypotheses (see Table 1) were tested separately for each coping outcome (i.e., active coping, avoidant coping, coping efficacy). A model that included all three coping outcomes simultaneously was also tested, but it did not yield adequate fit, $\chi^2(75) = 135.065$, $p = .17$, CFI = 0.89, RMSEA = .065, SRMR = .062. All models controlled for baseline levels of active coping, avoidant coping, or coping efficacy. Given their significant correlations with avoidant coping (see Table 4), race and per capita income were included as covariates in the initial SEM predicting T3 avoidant coping; however, when entered simultaneously, neither path was significant. Given that ethnic minorities are more likely to live in poverty than Caucasian-Americans (Krieger, Williams, & Moss., 1997) and the significant correlation between these variables in the current sample, $r(168) = -.31$, $p < .001$, it was hypothesized that the lack of significance of these paths may in part be due to the statistical overlap between these two variables. Thus, two models were run; one model included a path from race to avoidant coping and the

second included a path from income to avoidant coping. Neither path was significant and these paths were dropped in subsequent analyses.

All models were tested with and without the MLR estimator; all paths were in the same direction, and all but one path were at the same significance level regardless of the estimator used (i.e., the significance of the observed warmth loading on the parenting factor shifted from $p = .038$ to $p = .093$ in the avoidant coping model only when the MLR was used). As the shift in significance was minor and was only present in one of the three main effects models, the results of the standard estimator are reported.

Results revealed that the overall fit of the models provided borderline adequate fit to the data for active, $\chi^2(41) = 73.315$, $p = .001$, RMSEA = .06, SRMR = .06, CFI = .91, avoidant, $\chi^2(41) = 70.398$, $p = .003$, RMSEA = .06, SRMR = .07, CFI = .91, and coping efficacy models, $\chi^2(41) = 71.596$, $p = .002$, RMSEA = .06, SRMR = .06, CFI = .92. Although the RMSEA and SRMR values were in the adequate range, the CFI value for all models was at the low end of the acceptable range. In terms of the relations between the T1 predictors, positive parenting was significantly related to effortful control, standardized path coefficients (β) ranged from .77 to .79, $p < .001$, and surgency, β ranged from .31 to .32, $p < .001$, in all three models indicating substantial overlap between the primary predictors. T1 coping efficacy was significantly related to positive parenting, $\beta = .25$, $p = .008$; there were no other significant relations between T1

coping variables and the T1 parenting and temperament predictors (i.e., positive parenting, effortful control, surgency).

In terms of the primary main effects paths, none of the paths from the T1 parenting and temperament predictors to the T3 outcomes was significant (see Figures 4-6). The paths from the T1 coping variables to the T3 coping variables were all significant indicating substantial stability over time: active coping, $\beta = .47$, $p < .001$; avoidant coping, $\beta = .39$, $p < .001$; coping efficacy, $\beta = .39$, $p < .001$.

Moderation. Prior to testing the moderation hypotheses, composite variables were created to replace the latent variables so that interactions could be tested at the observed level. The composite for effortful control was created by averaging mother-reported and teacher-reported effortful control. For the parenting variables, the measures (i.e., mother-reported acceptance/rejection, child-reported acceptance/rejection, mother-reported consistent discipline, child-reported consistent discipline, observed warmth, observed listener-responsiveness/communication, observed hostility) were standardized prior to being averaged as they were measured using different scales. To minimize nonessential multicollinearity, the temperament and parenting composites were centered and the interaction terms were formed as the cross-product of the centered variables (see Aiken & West, 1991).

Six moderation models were estimated testing a total of six temperament by parenting interactions [i.e., two temperament variables (effortful control, surgency) by one parenting variable (positive parenting) by three coping outcomes (active coping, avoidant coping, coping efficacy)]. All models were tested in MPlus using path analysis and were tested with and without the MLR estimator; all paths were in the same direction and at the same significance level regardless of the estimator used. Results of the standard estimator are reported.

As in the main effects models, several of the relations between the T1 predictors were significant (see Table 8) as were the stability paths from the T1 coping variables to the T3 coping variables for the effortful control models, active, $\beta = .52$, $p < .001$, avoidant, $\beta = .40$, $p < .001$, coping efficacy, $\beta = .52$, $p < .001$, and for the surgency models, active, $\beta = .52$, $p < .001$, avoidant, $\beta = .39$, $p < .001$; coping efficacy, $\beta = .51$, $p < .001$, None of the 12 interactions was significant (see Figures 7 through 12). However, the paths from positive parenting to avoidant coping in both the effortful control model, $\beta = -.15$, $p = .08$, and the surgency model, $\beta = -.16$, $p = .053$, were marginal such that higher levels of positive parenting were associated with lower levels of avoidant coping. None of the other paths was marginal or significant.

Discussion

The current study examined the main and interactive effects of positive parenting and youths' temperament on youths' coping efforts and coping efficacy

in a sample of families in which one or both parents recently became unemployed. Contrary to hypotheses, there were no main effects of positive parenting, effortful control, or surgency on youths' active coping, avoidant coping, or coping efficacy. Also, neither of the two parenting by temperament interactions (i.e., positive parenting by effortful control, positive parenting by surgency) was significant for any of the coping outcomes. As discussed below, these unexpected findings may be in part due to methodological aspects of the study that differed from previous work, such as examining the effects of parenting and temperament simultaneously, measuring aspects of parenting other than those tested in previous work and using a more racially diverse sample. Also, the substantial statistical overlap between the primary predictors as well as moderate stability of youths' coping over time likely contributed to the nonsignificant findings.

The lack of significant main effects of parenting in particular is surprising given previous work examining the relations between parenting and youths' coping processes. For example, Power's (2004) review of the relations between parenting and youths' coping processes indicated that factors such as parental warmth, acceptance, support, family cohesion and firm rule enforcement were positively associated with engagement coping efforts and negatively associated with disengagement coping efforts. Further, the few studies that have examined the longitudinal relations between parenting and youths' coping have found support for the associations between parental responsiveness (McKernon et al.,

2001) and mother-child relationship quality (Vélez, Wolchik, Tein, & Sandler, in press) and adaptive coping in youth (i.e., problem focused coping and active coping respectively), as well as associations between parental hostility and maladaptive coping efforts (i.e., use of drugs or alcohol to cope, emotional outbursts; Johnson & Pandina, 1991). However, it is important to note that none of these studies examined the role of parenting and temperament simultaneously, thus leaving questions open regarding the unique contribution of parenting to youths' coping over and above temperament. The current study did reveal some significant correlations between T3 coping and measures of acceptance, rejection, listener responsiveness/communication, consistent discipline, and surgency, indicating that significant relations may have emerged if parenting and temperament were examined separately. Further, although contrary to hypotheses, it is important to note that it is not entirely unexpected that no significant relations were found between parenting and avoidant coping in the primary models. There has been more consistent support for the association of parenting with engagement coping than with disengagement coping (Power, 2004).

In terms of the relations between temperament and youths' coping processes, the lack of significant findings in the current study is also surprising given previous work indicating concurrent relations between effortful control or some aspects of surgency and adaptive coping efforts (Eisenberg et al., 1993;

Lengua et al., 1999; Lengua & Long, 2002; Wills, DuHamel, & Vaccaro, 1995). However, these studies uniformly examined cross-sectional relations between temperament and youths' coping. Although temperament is conceptualized as stable over time (Rothbart & Bates, 2006), it is possible that concurrent relations between temperament and coping are stronger than prospective relations. Further, as with the literature described above, none of these studies examined the role of temperament and parenting simultaneously. Additional work is needed to better delineate the unique contributions of parenting and temperament to coping, as well as how parenting and temperament may each shape youths' coping processes over time.

Although, to my knowledge, there is no direct previous support for parenting by temperament interactions in the prediction of youths' coping efforts and coping efficacy, there is a large body of work examining the joint effects of parenting and temperament on youths' outcomes more broadly. Given relatively consistent evidence that parenting and temperament in interaction with one another predict youths' outcomes in social, emotional, and behavioral domains (e.g., Dennis, 2006; Kochanska, 1997; Morris et al., 2002; Rubin et al., 2002; Stright et al., 2008; Valiente et al., 2004; Wootton, Frick, Shelton, & Silverthorn 1997), it is somewhat surprising that no significant interactive effects emerged in this study. Further research is necessary to better understand how temperament and the social environment combine to predict youths' coping processes.

Although support was not found for the primary main effect or interactive hypotheses, there were correlations that were supportive of the expected relations. For example, several significant small to moderate correlations emerged between measures of parenting and youths' coping (see Table 3). Significant cross-sectional correlations included positive relations between child-reported acceptance and active coping and coping efficacy, child-reported rejection and avoidant coping, and mother-reported acceptance and coping efficacy. Significant negative concurrent relations emerged for child-reported rejection and coping efficacy, and child-reported consistent discipline and avoidant coping. In terms of longitudinal correlations, significant positive relations emerged for child-reported acceptance and active coping and coping efficacy, child-reported rejection and avoidant coping, mother-reported acceptance and coping efficacy, and observed listener-responsiveness/communication and coping efficacy. Significant negative longitudinal relations emerged for child-reported rejection and coping efficacy, and mother-reported rejection and coping efficacy. For temperament, significant concurrent positive correlations emerged between child-reported surgency and active coping and coping efficacy, and significant longitudinal positive correlations were present between child-reported surgency and active coping. The findings of the correlational analyses are consistent with previous literature as well as with the current hypotheses. These findings suggest that there may be both concurrent and longitudinal relations between parenting or

temperament and youths' coping processes that were not revealed through the primary modeling analyses, especially with regard to maternal support and child surgency. Future work is necessary to better understand how factors such as maternal support and child surgency jointly and uniquely relate to youths' coping outcomes.

Although not central to the examination of how parenting and temperament predict youths' coping, it is interesting to note that many significant correlations emerged between measures of parenting and temperament. The majority of the correlations between surgency and effortful control and maternal acceptance, rejection, consistent discipline, and listener responsiveness/communication were significant. These relations indicated that overall, higher levels of surgency and effortful control were associated with higher levels of acceptance, listener responsiveness/communication and consistent discipline and with lower levels of rejection. Some of the significant correlations were across reporter (e.g., mother-reported effortful control and child-reported discipline) and across method of measurement (i.e., observed listener responsiveness/communication and teacher-reported effortful control). These relations provide additional support for the body of work that suggests that parenting and youths' temperament are related to each other. For example, there is evidence that children's temperament predicts parenting (e.g., child irritability predicts inconsistent discipline; Lengua & Kovacs, 2005) and that parenting

predicts temperament (e.g., inconsistent discipline predicts child negative emotionality; Lengua & Kovacs, 2005). Delineating how these bidirectional processes emerge and are expressed over time will allow investigators to better understand and capture the dynamic processes involved in the socialization of youths' coping as well as other outcomes (Pettit & Arsiwalla, 2008).

There are a number of possible explanations for the discrepancy between the current findings for the primary main and interactive hypotheses and those of previous work examining the effects of parenting and temperament on youths' coping, as well as the broader literature examining the joint effects of parenting and temperament on other types of outcomes. First, as mentioned above, this is the first study to examine the effects of parenting and temperament simultaneously. The inclusion of measures of both parenting and temperament led to a number of methodological challenges. Specifically, very large correlations emerged between several of the parenting variables and effortful control (see Table 7). Even after combining the originally proposed support, hostility, and consistent discipline latent variables into a single positive (versus negative) parenting latent variable to reduce overall collinearity in the measurement model, the correlation between the latent constructs for positive parenting and effortful control was very large. Due to the substantial overlap between parenting and effortful control, there may have been insufficient unique variance to allow either parenting or effortful control to predict the coping

outcomes. In the correlational analyses, there were significant longitudinal relations between measures of maternal support and active coping, avoidant coping, and coping efficacy. The loss of these relations in the primary models may have been due in part to the high correlations between parenting and effortful control.

A significant relation between parenting and effortful control was not unexpected, as there is evidence to suggest that environmental influences such as parenting play an integral role in the development of effortful control and associated aspects of self-regulation (e.g., Kochanska, Murray & Harlan, 2000; Olson, Bates, & Bayles, 1990). However, the current correlation was exceptionally high. This high correlation may have been in part due to shared method variance. Both the positive parenting variable and the effortful control variable included mother-report measures (i.e., mother-reported acceptance/rejection, mother-reported consistent discipline, and mother-reported effortful control), as well as other indicators of the constructs. In future work, assessing parenting and temperament variables using different reporters or methods (e.g., by using observational measures of parenting and teacher-reported measures of effortful control), may in part address the issue of collinearity that emerged in the current study and allow for cleaner tests of the relations of parenting and temperament to youths' coping.

There was only moderate change in coping over the course of the year-long study. Limited variability in the coping outcome measures could have decreased the likelihood of finding significant relations. One explanation for the limited variability is that the one-year interval between assessments was problematic for capturing shifts in coping. It is possible that factors such as parenting have a slow, consistent impact on youths' coping that can only be seen over longer periods of time. Recently, Vélez and colleagues (in press) found time-lagged effects on youths' coping, such that mother-child relationship quality in childhood significantly predicted change in youths' coping six years later. Alternatively, it is possible that shifts in coping in response to parental unemployment occurred prior to the measurement of coping in the current study. Some families were recruited several months after the parents lost their job (i.e., up to 18 weeks following job termination). It is possible that shifts in the youths' coping occurred closer in time to the change in employment status. Additional work is necessary to better understand the time-course of the development and stabilization of coping, and whether changes in youths' coping in response to stressors and other environmental shifts (e.g., intervention-induced improvement in parenting) occur rapidly or over longer periods of time.

It is also possible that the timing of the measurement of parenting did not best capture the effects of interest. There may have been substantial changes in parenting over the course of the study year that were not captured by measuring

parenting at baseline. It is reasonable to expect, for example, that there was a decline in the quality of parenting over the course of the year due to increases in financial strain and associated stressors (e.g., loss of home, increased interparental conflict, increased parental psychopathology; Atkinson, Liem, & Liem, 1986, Dooley, Catalano, & Wilson, 1994, Jurich, Collins, & Griffin, 1993). Given the potential for shifts in the quality of parenting over the course of the study, it is possible that parenting measured more closely to the measurement of coping efforts might have yielded a stronger relation. Examination of the trajectories of parenting, coping, and their covariation following parental unemployment would be beneficial for elucidating how these factors and their relations change over time.

The results of the current study also may have differed from previous work examining the relations between parenting and youths' coping due to the very broad measure of parenting used (i.e., a combination of support, low hostility, and consistent discipline). There is more consistent support for the relations between support-related constructs (e.g., responsiveness, acceptance/rejection) and youths' coping processes than for control- or discipline-related constructs, especially when examining longitudinal data (Johnson & Pandina, 1991; McKernon et al., 2001; Vélez et al., in press). Further, as described above, there were more significant correlations in the current study between measures of support-related constructs and youths' coping than between

control-related constructs and coping (see Table 3). Combining measures of discipline with measures of maternal support and low hostility may have diluted the potential positive predictive relations of maternal support to youths' coping.

Another issue that may have contributed to the lack of significant findings is the potential for racial variability in parenting, coping, and their interrelations that may not have been adequately captured. The current sample was almost 50% African-American. Although the majority of previous work on youths' coping has used primarily Caucasian-American samples, there is some evidence of variability in coping styles across racial groups (e.g., Chapman & Mullis, 2000; Rasmussen, Aber, & Bhana, 2004), as well as evidence of variability in parenting strategies and their relations to youths' outcomes (Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004; Rothbaum & Weisz, 1994). The measure of coping used in this study was developed with samples that were primarily Caucasian-American. Thus, there may be some coping strategies that are more prevalent in African-American youth that were not captured with this measure (e.g., spiritual support). Additionally, a significant correlation emerged in the current data set between race and avoidant coping; African-American youth and other minority youth exhibited higher levels of avoidant coping than Caucasian-American youth. The more normative use of parenting strategies such as physical discipline in African-American populations may lead to less negative effects of harsher strategies on youths' coping processes for African-American youths than

Caucasian-American youths (e.g., Landsford et al., 2005). It is also possible that positive parenting strategies relate differently to coping across African-American and Caucasian-American youths. A recent study using the current sample examined the moderating role of race on the associations between maternal acceptance and youths' coping efforts and coping efficacy, and found that maternal acceptance was associated with more active coping for Caucasian-American but not African-American youth (Vélez, Wolchik, Eisenberg, Ayers, Sandler, & Millsap, 2010). These data suggest that further exploration of the role of race, ethnicity, and culture is necessary to better understand how parenting, coping, and their covariation vary across groups.

In addition to racial variability, youths in the current sample ranged in age from nine to15. There is evidence to suggest that there are developmental shifts in the coping strategies youths tend to employ. For example, more emotion-focused and cognitively demanding coping strategies (e.g., cognitive restructuring) tend to emerge later in childhood and into adolescence (Altshuler & Ruble, 1989; Band & Weisz, 1988; Band & Weisz 1990; Compas, Malcarne, & Fondacaro, 1988; Curry & Russ, 1985; Spivack & Shure, 1982; Wertlieb, Weigel, & Feldstein, 1987). Similarly, there are important changes in parenting as children age (e.g., changes in the quantity and quality of parental monitoring, decreases in the amount of time spent with children, changes in the types and amounts of discipline employed, and overall decreases in physical affection;

Maccoby, 1984). It is therefore reasonable to expect that there may also be developmental shifts in how parenting influences youths' coping. For example, as children transition to adolescence, they typically spend more time outside the home and with their peers. As experiences with peers have the potential to play an increasingly salient role in the socialization of youths' coping and coping efficacy over time (e.g., Singh & Bussey, 2010), it is possible that there may be a corresponding decrease in the strength of the relation between parenting and youths' coping in adolescence. Age was evaluated as a potential covariate in the current study and was subsequently dropped due to its lack of significant correlations with youths' coping, suggesting no main effect of age on youths' coping in the current sample (see Table 4). However, the current study did not examine the potentially changing relation of parenting to youths' coping as children transition into adolescence because the sample size was too small to adequately test 3-way interactions. Future work should examine age as a moderator of the relations between parenting and youths' coping.

Although there is evidence to suggest that temperament generally is predictive of outcomes across adolescence and even into adulthood (e.g., Caspi, Henry, McGee, Moffitt, & Silva, 1995, Schwartz, Snidman, & Kagan, 1999; Schwartz, Wright, Shin, Kagan, & Rauch, 2003), it is possible that the strength of the relations between temperament and youths' coping may shift over time. Temperament factors such as surgency and effortful control may play an integral

role in the early development and emergence of youths' coping styles. It is possible, however, that other factors may begin to play a more central role over time. For example, although children low in surgency or effortful control may have a temperamentally-based propensity to employ more disengagement coping strategies such as avoidant coping relative to children high in surgency or effortful control, it is possible that these tendencies shift over time due to the influence of other factors. Potential influences include instruction in more engagement-oriented strategies, reinforcement of the use of these engagement strategies from parents or peers, as well as reinforcement experienced from the successful resolution of stressors or of one's emotional reactions to the stressors following the use of engagement-oriented strategies. Further, children who are high in surgency or effortful control, relative to children low in surgency or effortful control, may begin to more frequently employ disengagement coping strategies if they are repeatedly faced with stressors that exceed their developmental capacity for coping or experience multiple stressors that are beyond their control. Finally, it is also possible that factors other than positive parenting, effortful control, or surgency are, in general, better predictors of youths' coping. Factors that merit further exploration include other aspects of temperament (e.g., negative emotionality), more directive aspects of parenting (e.g., coaching, direct instruction), and peer influences (e.g., peer modeling and/or coaching of coping strategies), as well as the frequency and severity of experienced stressful events.

It also may be important to consider the influences of other caregivers, such as fathers and grandparents, on youths' coping processes. The exploration of the role of grandparents and other caregivers will be especially important for African-American youth, as the co-residence of extended family members within and across generations is more prevalent in this population than in other racial groups (e.g., Chase-Lansdale, Brooks-Gunn, & Zamsky, 1994; Demo & Cox, 2000).

This investigation has a number of limitations. First, the study employed relatively complex statistical modeling approaches with only a moderate sample size. A larger sample size may have been necessary to adequately support the use of structural equation modeling with multiple latent variables. Second, as mentioned above, the study may have inadequately considered the role of age and racial variability. As previously noted, the current sample size could not support testing these potentially informative three-way interactions. Third, although this study examined baseline income as a potential covariate, baseline income represented pre-unemployment income. This may not have been the most meaningful measure of income given presumed substantial changes in income following unemployment. Measuring decline in income or financial strain may have been more appropriate for this population.

Given the lack of significant findings in the current study despite previous evidence to the contrary, it will be important to continue to explore the role of parenting and temperament in youths' coping processes. The use of longitudinal

models will be especially important, as it is not yet clear how these factors combine to predict youths' coping efforts and coping efficacy over time. An important avenue for investigation will be to further delineate which specific aspects of parenting and temperament are most strongly related to coping (e.g., support versus control-related constructs, negative emotionality versus surgency). Future work should also consider more focused parental influences on youths' coping, such as parental coaching or direct instruction. It is reasonable to expect that the specific strategies that parents teach and reinforce may have implications for how children cope with stress (Kliewer et al., 1994). Additionally, the exploration of the relations between parenting and temperament and other aspects of the stress and coping process, such as youths' threat appraisals, will advance our understanding of how parenting and temperament shape youths' responses to stress. Further, given potential racial and sex differences in youths' coping (Rasmussen, Aber, & Bhana, 2004; Santiago & Wadsworth, 2009) and in parenting (Rothbaum & Weisz, 1994), as well as developmental shifts in coping (e.g., Band & Weisz, 1988), it will be important to explore the potential moderating role of age, race, and sex in the relations between parenting and temperament on youths' coping. Finally, it will be important to explore the role of other potential predictors of youths' coping, such as the frequency and severity of stressful events, peer influences, and physiological reactivity. A comprehensive understanding of predictors of adaptive youths' coping efforts,

especially modifiable predictors, will provide guidance for treatment and prevention efforts to promote youths' positive adaptation in the face of stress.

Table 1.

Hypothesized Main Effects of Parenting and Temperament on Children's Coping and Coping Efficacy

Predictor	Relation to Active Coping	Relation to Avoidant Coping	Relation to Coping Efficacy
Surgency	Positive	Negative	Positive
Effortful Control	Positive	Negative	Positive
Supportive Parenting	Positive	Negative	Positive
Consistent Discipline	Positive	Negative	Positive
Parental Hostility	Negative	Positive	Negative

Table 2.

Descriptives of Demographic and Primary Study Variables

Measure (Wave, Reporter)	*M* (*SD*)	Actual Minimum	Actual Maximum	Skew	Kurtosis
1. Child Race (1,P)	.62 (.49)	.00	1.00	-.49	-1.78
2. Per Capita Income (1,P)	13.56 (9.31)	.42	50.00	.94	1.28
3. Child Age (1,M)	11.76 (1.61)	8.97	14.90	.09	-1.08
4. Child Gender (1,M)	.46 (.50)	.00	1.00	.15	-2.00
5. Family Structure (1,M)	1.54 (.50)	1.00	2.00	-.17	-1.99
6.Surgency (1,C)	3.73 (.63)	2.13	5.00	-.11	-.50
7.Surgency (1,M)	3.71 (.64)	1.77	4.95	-.43	-.19
8. Effortful Control (1,M)	3.52 (.57)	1.88	4.83	0.00	-.34
9. Effortful Control (1,T)	3.72 (.68)	1.84	5.00	-.41	-.51
10. Acceptance (1.C)	2.64 (.40)	1.20	3.00	-1.11	.59
11 Rejection (1,C)	1.46 (.40)	1.00	2.60	.93	.21
13. Consistent Discipline (1,C)	2.42 (.41)	1.13	3.00	-.56	-.13
14. Acceptance (1,M)	2.77 (.24)	1.81	3.00	-1.31	1.37
15. Rejection (1,M)	1.30 (.27)	1.00	3.00	2.08	8.91
16. Consistent Discipline (1,M)	2.63 (.39)	1.25	3.00	-1.09	.66
18. Warmth (1,O)	1.53 (.81)	1.00	5.00	1.90	.18
19. Listener Responsiveness/ Communication (1,O)	1.12 (-.28)	2.25	9.00	-.28	.57
20. Hostility (1,O)	1.67 (1.13)	1.00	7.00	1.99	3.91
21. Active Coping (1,C)	2.74 (.58)	1.25	4.00	-.16	-.15

Note: P = Mother and Father Report combined; C = Child Report; M = Mother Report; T = Teacher Report; O = Observed. Child Ethnicity: 0 = Caucasian, 1 = African American or Other. Child Gender: 0 = Female, 1 = Male. Family Structure: 1 = Two Parent Family, 2 = Single Mother.

Table 2.

Descriptives of Demographic and Primary Study Variables (Continued)

Measure (Wave, Reporter)	*M* (*SD*)	Actual Minimum	Actual Maximum	Skew	Kurtosis
22. Avoidant Coping (1,C)	2.54 (.54)	1.33	4.00	.10	-.24
23. Coping Efficacy (1,C)	3.11 (.44)	1.38	4.00	-.65	.85
24. Active Coping (3,C)	2.82 (.53)	1.42	4.00	.08	-.24
25. Avoidant Coping (3,C)	2.56 (.56)	1.17	3.92	.24	-.23
26. Coping Efficacy (3,C)	3.24 (.39)	1.88	4.00	-.33	.30

Note: P = Mother and Father Report combined; C = Child Report; M = Mother Report; T = Teacher Report; O = Observed. Child Ethnicity: 0 = Caucasian, 1 = African American or Other. Child Gender: 0 = Female, 1 = Male. Family Structure: 1 = Two Parent Family, 2 = Single Mother.

Table 3.

Zero-Order Correlations: Primary Variables

Measure (Wave, Reporter)	1.	2.	3.	4.	5.	6.	7.	8.	9.
1.Surgency (1,C)	--	.34**	.10	-.00	.18*	-.26***	.14	.07	-.20**
2.Surgency (1,M)		--	.22**	-.04	.05	-.04	.09	.19**	-.23***
3. Effortful Control (1,M)			--	.46***	.14*	-.26***	.28***	.31***	-.31***
4. Effortful Control (1,T)				--	.20*	-.19*	.22*	.36***	-.25**
5. Acceptance (1,C)					--	-.55***	.33***	.33***	-.18*
6. Rejection (1,C)						--	-.60***	-.30***	.30***
7. Consistent Discipline (1,C)							--	.31***	-.19**
8. Acceptance (1,M)								--	-.35***
9. Rejection (1,M)									--
10. Consistent Discipline (1,M)									
11. Warmth (1,O)									
12. Listener Responsiveness/ Communication (1,O)									
13. Hostility (1,O)									
14. Active Coping (1,C)									
15. Avoidant Coping (1,C)									
16. Coping Efficacy (1,C)									
17. Active Coping (3,C)									
18. Avoidant Coping (3,C)									
19. Coping Efficacy (3,C)									

Note: C = Child Report; M = Mother Report; T = Teacher Report; O = Observed
* $p \leq .05$; ** $\leq .01$; *** $p \leq .001$

Table 3.

Zero-Order Correlations: Primary Variables (Continued)

Measure (Wave, Report)	10.	11.	12.	13.	14.	15.	16.
1.Surgency (1,C)	.25***	.01	.23**	-.09	.20**	-.01	.28***
2.Surgency (1,M)	.20**	.12	.17*	-.11	-.10	-.02	-.04
3. Effortful Control (1,M)	.30***	.10	.14	-.13	.06	-.11	.02
4. Effortful Control (1,T)	.10	.14	.24**	-.21*	-.04	-.09	-.07
5. Acceptance (1.C)	.11	.15*	.17*	-.01	.27***	.01	.38***
6. Rejection (1,C)	-.25***	-.13	-.20**	.01	-.09	.15*	-.22**
7. Consistent Discipline (1,C)	.28***	.08	.17*	-.02	-.06	-.17*	.10
8. Acceptance (1,M)	.25***	.14	.18*	-.12	.06	-.05	.17*
9. Rejection (1,M)	-.61***	-.05	-.16*	.15	.00	.10	-.02
10. Consistent Discipline (1,M)	--	-.03	.13	-.12	-.02	-.14	.06
11. Warmth (1,O)		--	.26***	-.07	.13	.11	.05
12. Listener Responsiveness/ Communication (1, O)			--	-.30***	.05	.03	-.05
13. Hostility (1,O)				--	-.11	.01	.06
14. Active Coping (1,C)					--	.46***	.54***
15. Avoidant Coping (1,C)						--	.14*
16. Coping Efficacy (1,C)							--
17. Active Coping (3,C)							
18. Avoidant Coping (3,C)							
19. Coping Efficacy (3,C)							

Note: C = Child Report; M = Mother Report; T = Teacher Report; O = Observed
* $p \leq .05$; ** $\leq .01$; *** $p \leq .001$

Table 3.

Zero-Order Correlations: Primary Variables (Continued)

Measure (Wave, Report)	17.	18.	19.
1.Surgency (1,C)	.17*	-.09	.14
2.Surgency (1,M)	-.02	-.13	-.05
3. Effortful Control (1,M)	.06	-.13	.16
4. Effortful Control (1,T)	-.16	.00	-.01
5. Acceptance (1.C)	.26***	-.08	.31***
6. Rejection (1,C)	-.06	.26***	-.21**
7. Consistent Discipline (1,C)	.10	-.14	.06
8. Acceptance (1,M)	.11	.06	.23**
9. Rejection (1,M)	-.10	-.03	-.18*
10. Consistent Discipline (1,M)	.12	.00	.10
11. Warmth (1,O)	.00	-.13	.12
12. Listener Responsiveness/ Communication (1, O)	-.06	-.15	.18*
13. Hostility (1,O)	.04	-.01	-.10
14. Active Coping (1,C)	.53***	.14	.32***
15. Avoidant Coping (1,C)	.23**	.38***	.06
16. Coping Efficacy (1,C)	.45***	.05	.53***
17. Active Coping (3,C)	--	.40***	.45***
18. Avoidant Coping (3,C)		--	.11
19. Coping Efficacy (3,C)			--

Note: C = Child Report; M = Mother Report; T = Teacher Report; O = Observed
* $p \leq .05$; ** $\leq .01$; *** $p \leq .001$

Table 4.

Zero-Order Correlations: Potential Covariates and Coping Outcome Variables

Measure (Wave)	1.	2.	3.	4.	5.	6.	7.	8.
1. Child Race (1)	--	-.31***	.16*	.01	-.14	.11	.24**	.08
2. Income (1)		--	.08	.11	.29***	-.10	-.22**	.06
3. Child Age (1)			--	-.07	-.05	.08	.02	-.07
4. Child Gender (1)				--	-.01	-.02	.06	.04
5. Family Structure (1)					--	.13	.00	.06
6. Active Coping (3)						--	.40***	.45***
7. Avoidant Coping (3)							--	.11
8. Coping Efficacy (3)								--

Note: Child Ethnicity: 0 = Caucasian, 1 = African American or Other. Child Gender: 0 = Female, 1 = Male. Family Structure: 1 = Two Parent Family, 2 = Single Mother.
* $p \leq .05$; ** $\leq .01$; *** $p \leq .001$

Table 5.

Zero-Order Correlations: Temperament Latent Variable Indicators

Measure (Variable, Report)	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Attention (Effortful Control,M)	--	.31***	.69***	.36***	.18*	-.10	.01	.24***	.11
2. Attention (Effortful Control,T)		--	.48***	.81***	.06	.11	.03	.08	.08
3. Inhibitory Control (Effortful Control,M)			--	.52***	.22**	-.05	-.06	.16*	.30***
4. Inhibitory Control (Effortful Control,T)				--	-.03	.20*	.11	.06	.10
5. Social Approach/Withdrawal (Surgency,M)					--	-.72***	-.25***	.60***	.13
6. Shyness (Surgency,M)						--	.36***	-.50***	-.11
7. Shyness (Surgency,C)							--	-.20**	-.16*
8. Positive Emotionality (Surgency,M)								--	.20**
9. Positive Emotionality (Surgency,C)									--

Note: C = Child Report; M = Mother Report; T = Teacher Report
* p ≤ .05; ** ≤ .01; *** p≤ .001

Table 6.

Preliminary Latent Variable Indicators

Latent Variable	Indicators (Report)
Support	Acceptance (M) Acceptance (C) Warmth (O) Listener Responsiveness/Communication (O)
Consistent Discipline	Consistent Discipline (M) Consistent Discipline (C)
Hostility	Rejection (M) Rejection (C) Hostility (O)
Surgency	Surgency (M) Surgency (C)
Effortful Control	Effortful Control (M) Effortful Control (T)

Note: C = Child Report; M = Mother Report; T = Teacher Report; O = Observed

Table 7.

Initial Measurement Model: Correlations Among Latent Variables

Variable	1.	2.	3.	4.	5.
1. Support	--	.81***	-.88***	.63***	.44**
2. Discipline		--	-.76***	.71***	.54***
3. Hostility			--	-.73***	-.58***
4. Effortful Control				--	.11
5. Surgency					--

Note: * $p \leq .05$; ** $\leq .01$; *** $p \leq .001$

Table 8.

Correlations Between Predictors and Interaction Terms in Moderation Models

Variable	Positive Parenting	Effortful Control	Surgency	T1 Coping
T3 Active Coping				
Positive Parenting	--	.38***	.22***	.06
Effortful Control		--	.13	.05
Surgency			--	-.10
T1 Active Coping				--
T3 Avoidant Coping				
Positive Parenting	--	.38***	.22***	-.10
Effortful Control		--	.13	-.10
Surgency			--	-.02
T1 Avoidant Coping				--
T3 Coping Efficacy				
Positive Parenting	--	.38***	.22***	.19**
Effortful Control		--	.13	-.004
Surgency			--	-.04
T1 Coping Efficacy				--

Note: * $p \leq .05$; ** $\leq .01$; *** $p \leq .001$

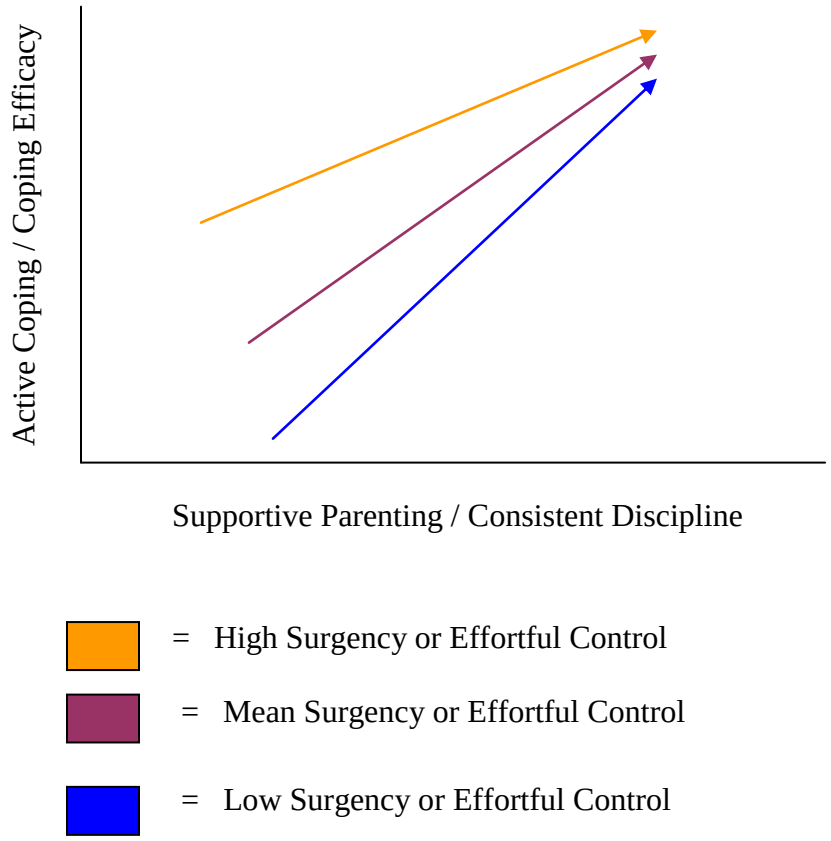

Figure 1. Interactive Effects of Temperament with Supportive Parenting or Consistent Discipline on Children's Active Coping and Coping Efficacy.

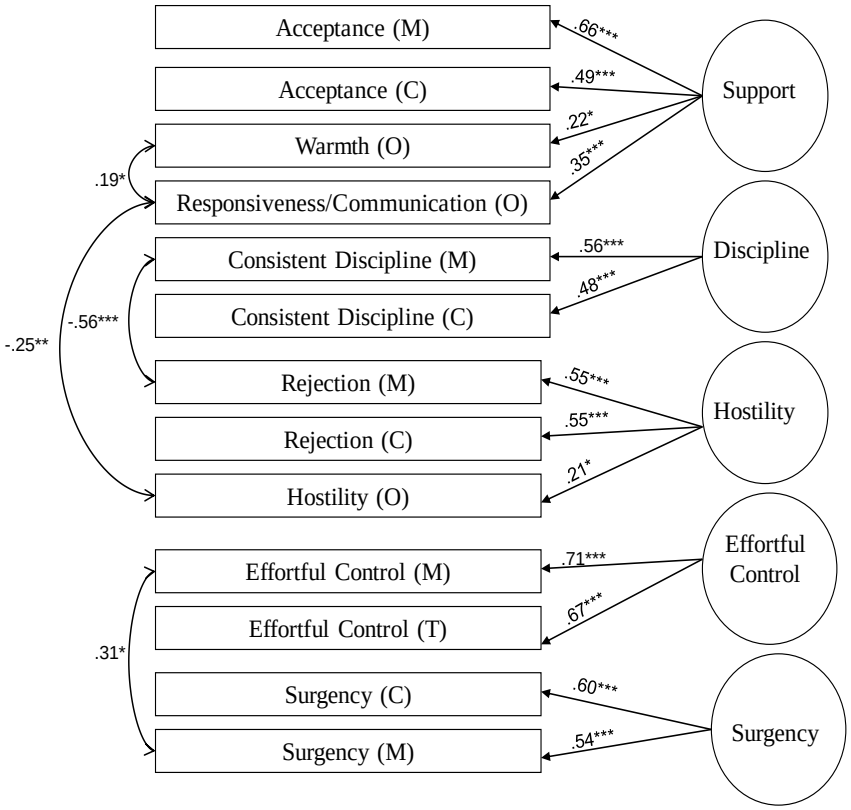

Figure 2. Initial measurement model. Note: M = Mother Report; C = Child Report; T = Teacher Report; O = Observational Data. Standardized coefficients are presented.

*p≤.05; **p≤.01; ***p≤.001

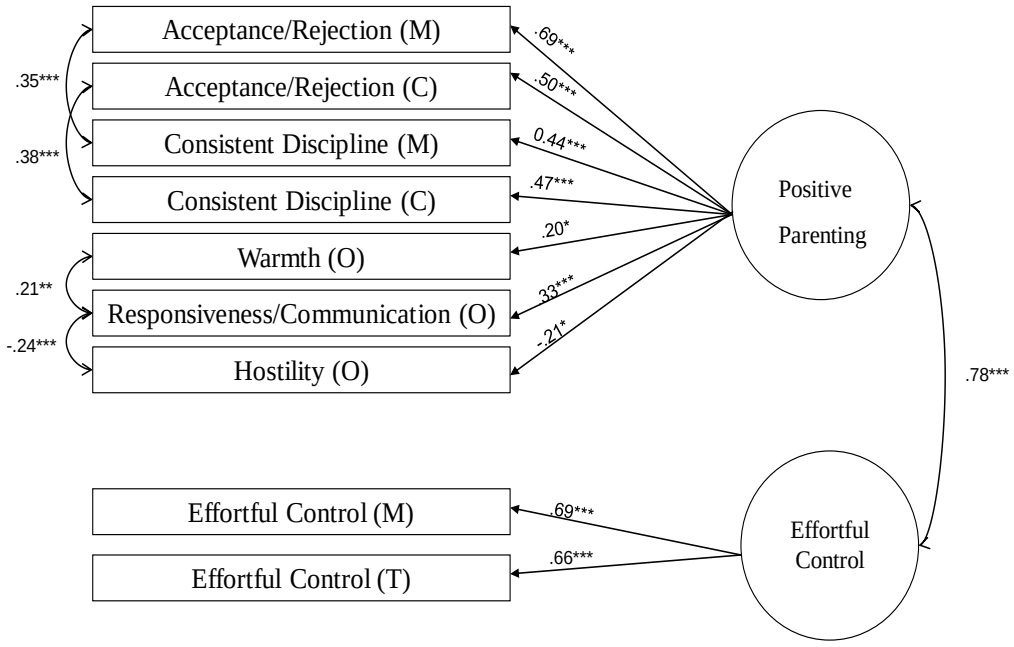

Figure 3. Final measurement model. Note: M = Mother Report; C = Child Report; T = Teacher Report; O = Observational Data. Standardized coefficients are presented.

*p≤.05; **p≤.01; ***p≤.001

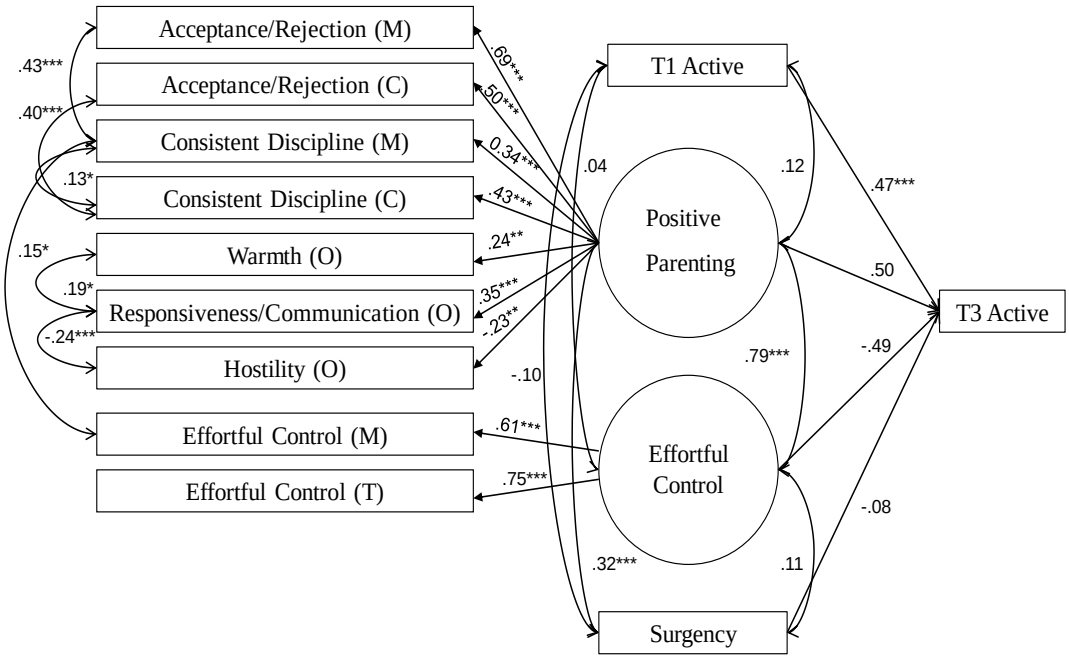

Figure 4. Main effects model: Active coping. Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

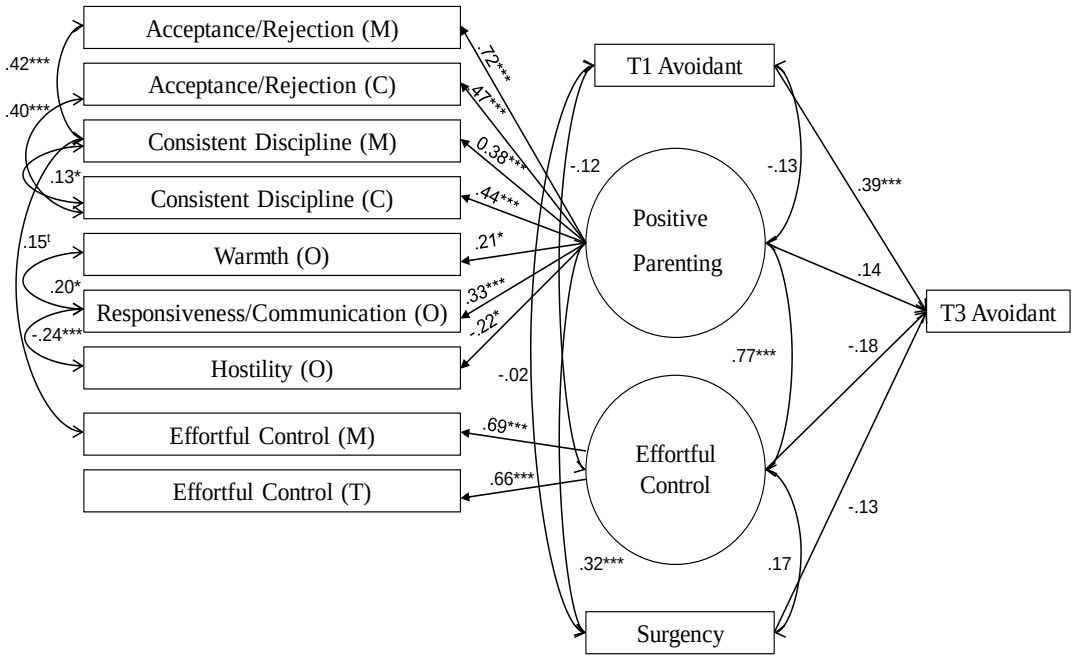

Figure 5. Main effects model: Avoidant coping. Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

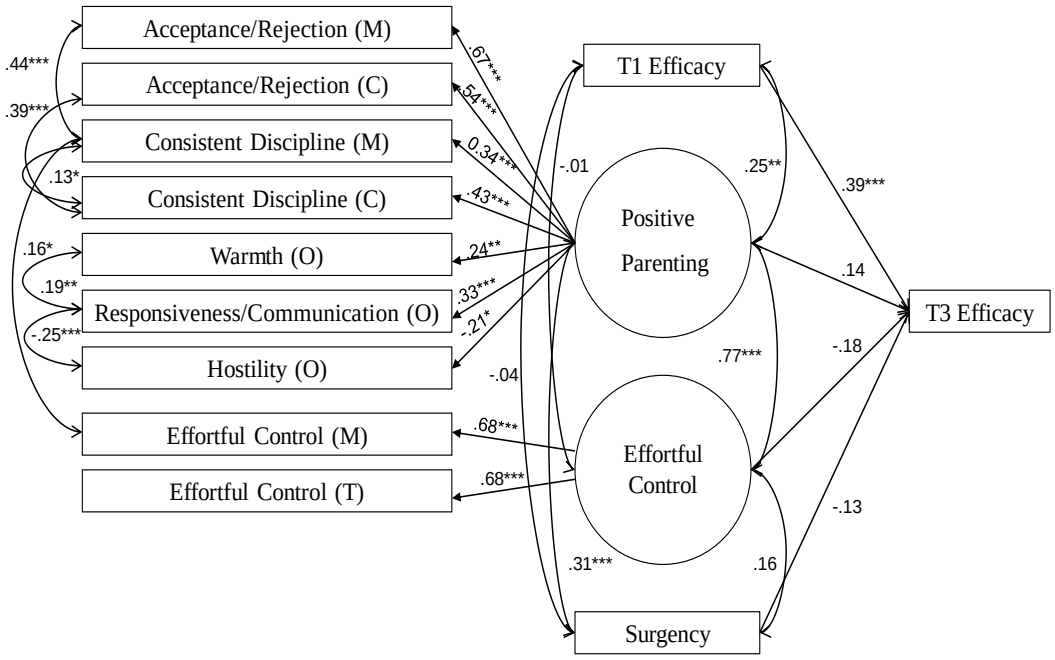

Figure 6. Main effects model: Coping efficacy. Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

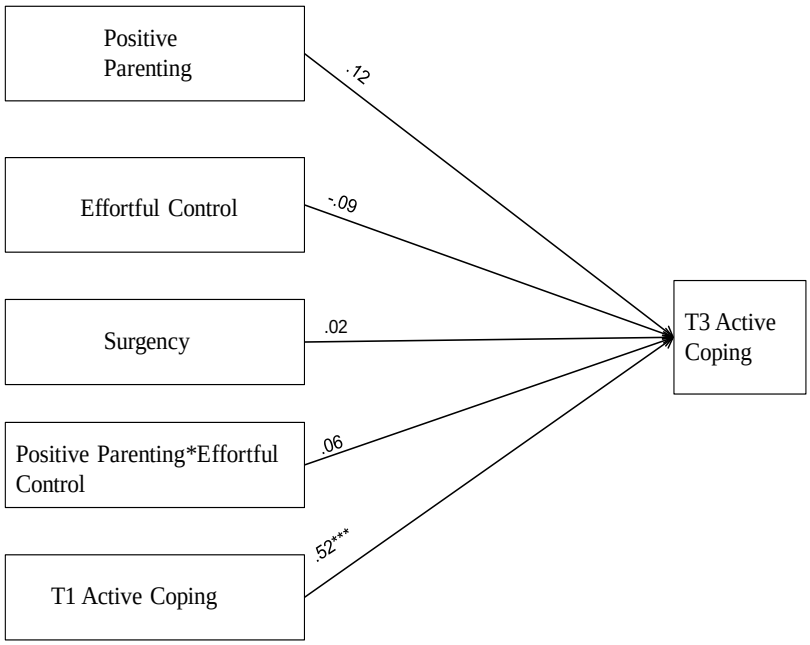

Figure 7. Effortful control moderation model: Active coping. Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

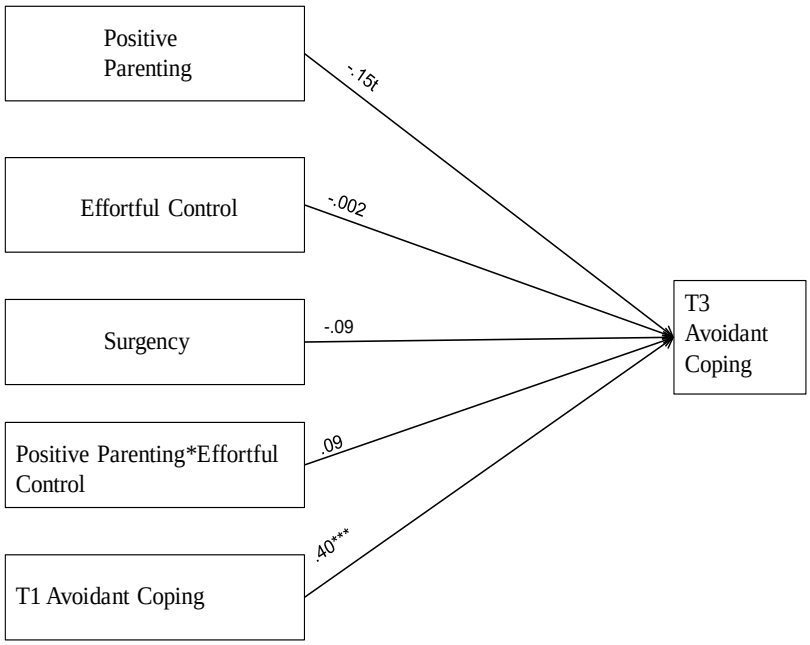

Figure 8. Effortful control moderation model: Avoidant coping.

Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

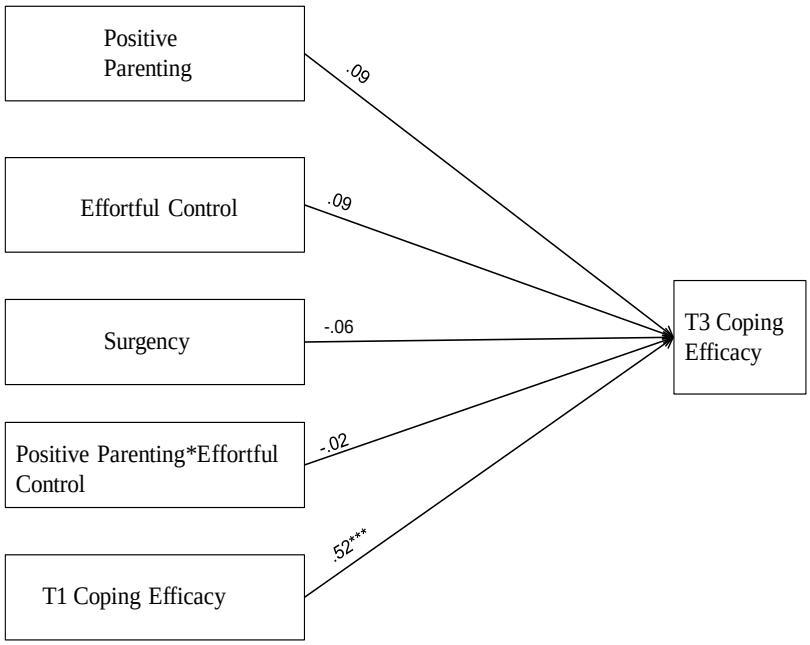

Figure 9. Effortful control moderation model: Coping efficacy. Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p ** \leq .01$; $*** p \leq .001$

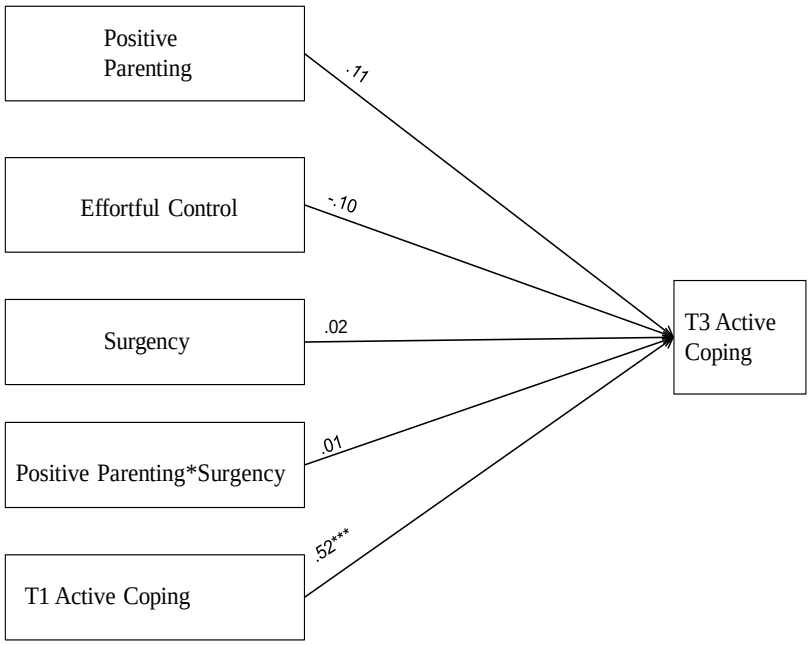

Figure 10. Surgency moderation model: Active coping. Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

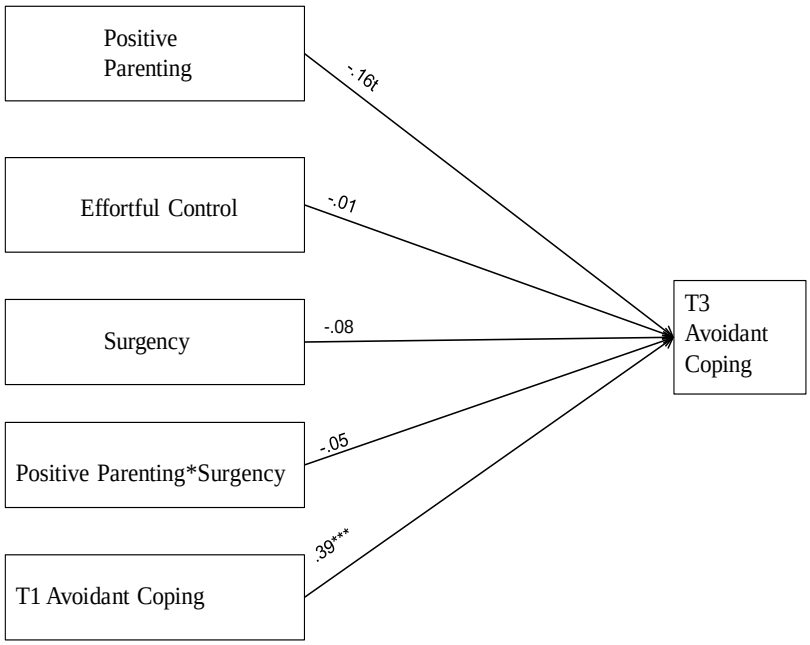

Figure 11. Surgency moderation model: Avoidant coping . Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

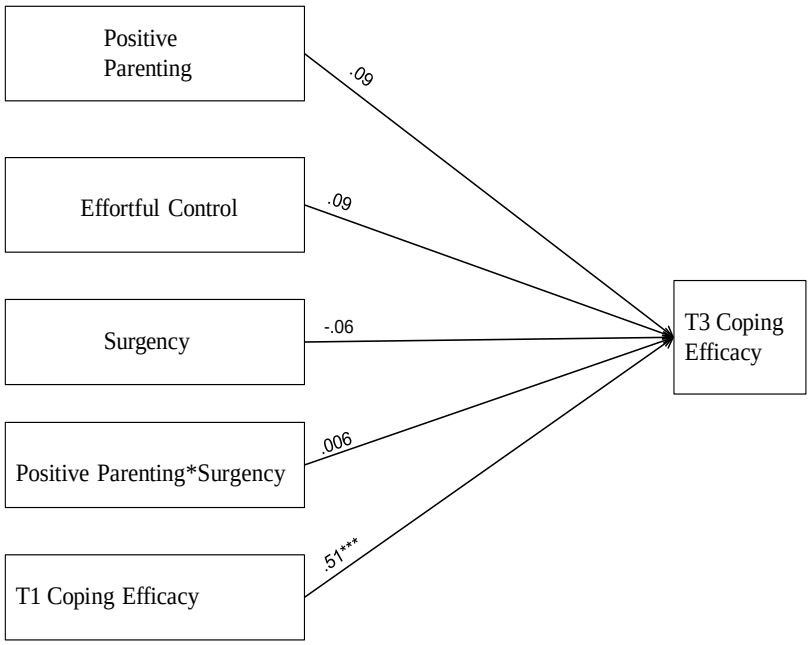

Figure 12. Surgency moderation model: Coping efficacy. Note: M =Mother Report; C = Child Report; T = Teacher Report; O = Observed Data. Standardized coefficients are presented.

$^{t}p \leq .10 * p \leq .05$; $p^{**} \leq .01$; $^{***}p \leq .001$

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APPENDIX A

MEASURES

Temperament

Child Report Attention Item Text and Reverse Coding

9. It is easy for me to really concentrate on homework problems	
14. When interrupted or distracted, I forget what I was about to say	R
18. I find it hard to shift gears when I go from one class to another at school	R
20. When trying to study, I have difficulty tuning out background noise and concentrating	R
21. I am good at keeping track of several different things that are happening around me	
30. I tend to get in the middle of one thing, then go off and do something else	R
36. I pay close attention when someone tells me how to do something	

Parent Report of Attention Item Text and Reverse Coding

7. Finds it easy to really concentrate on a problem	
12. Is hard to get her/his attention when s/he is concentrating on something	R
13. Has a difficult time tuning out background noise and concentrating when trying to study	R
15. When interrupted or distracted, forgets what s/he was about to say	R
23. Often doesn't hear me when s/he is working on something	R
26. Is good at keeping track of several different things that are happening around him/her	
31. Has a lot of trouble stopping an activity when called to do something else	R
35. Pays close attention when someone tells him/her how to do something	
37. When practicing an activity, has a hard time keeping his/her mind on it	R
42. Is often in the middle of doing one thing and then goes off to do something else without finishing it	R
45. Has a hard time concentrating on an activity when there are distracting noises	R

Teacher Report Attention Item Text and Reverse Coding

1. Finds it easy to really concentrate on a problem	
3. Is hard to get her/his attention when s/he is concentrating on something	R
6. Has a difficult time tuning out background noise and concentrating when trying to study	R
9. When interrupted or distracted, forgets what s/he was about to say	R
11. Often doesn't hear me when s/he is working on something	R
13. Is good at keeping track of several different things that are happening around him/her	
16. Has a lot of trouble stopping an activity when called to do something else	R
19. Pays close attention when someone tells him/her how to do something	
22. When practicing an activity, has a hard time keeping his/her mind on it	R
24. Is often in the middle of doing one thing and then goes off to do something else without finishing it	R
26. Has a hard time concentrating on an activity when there are distracting noises	R

Child Report Inhibitory Control Item Text and Reverse Coding

5. When someone tells me to stop doing something, it is easy for me to stop.	
7. It's hard for me to not open presents before I'm supposed to	R
15. The more I try to stop myself from doing something I shouldn't, the more likely I am to do it	R
24. It's easy for me to keep a secret	
33. I can stick with my plans and goals	

Parent Report Inhibitory Control Item Text and Reverse Coding

1. Has a hard time waiting his/her turn to speak when excited	R
5. Can lower his/her voice when asked to do so	

8. Opens presents before s/he is supposed to	R
16. Is more likely to do something s/he shouldn't do the more s/he tries to stop her/himself	R
19. Is able to stop him/herself from laughing at inappropriate times	
29. Has trouble sitting still when s/he is told to (at school, films, etc.)	R
33. Is usually able to stick with his/her plans and goals	
40. Is good at following instructions	
43. Can wait before entering into new activities if s/he is asked to	

Teacher Report Inhibitory Control Item Text and Reverse Coding

2. Has a hard time waiting his/her turn to speak when excited	R
4. Can lower his/her voice when asked to do so	
7. Opens presents before s/he is supposed to	R
8. Is more likely to do something s/he shouldn't do the more s/he tries to stop her/himself	R
12. Is able to stop him/herself from laughing at inappropriate times	
14. Has trouble sitting still when s/he is told to (at school, films, etc.)	R
17. Is usually able to stick with his/her plans and goals	
20. Is good at following instructions	
23. Can wait before entering into new activities if s/he is asked to	

Child Report Positive Emotionality Item Text and Reverse Coding

3. I laugh and smile at things	
8. I do not laugh or smile at things	R
12. I smile often	

17. I do not laugh often	R
22. My mood is generally cheerful	
27. I laugh several times a day	
32. Generally, I am happy	

Parent Report Positive Emotionality Item Text and Reverse Coding

2. Smiles often	
11. Laughs several times a day	
20. Generally s/he is happy	
27. Laughs and smiles at a lot of things	
32. His/her mood is generally cheerful	
38. Does not laugh or smile at many things	R
41. Does not laugh often	R

Child Shyness Item Text and Reverse Coding

1. I feel shy about meeting new people	
4. I feel shy with kids of the opposite sex	
26. I am shy	
31. I am not shy	R

Parent Report Shyness Item Text and Reverse Coding

6. Can generally think of something to say, even with strangers	R
9. Is shy	
17. Likes meeting new people	R

25. Is not shy	R
34. Feels shy about meeting new people	

Parent Report Social Approach and Withdrawal Item Text and Reverse Coding

3. Usually moves towards new objects shown to him/her	
14. Takes him/her no time at all to get used to new people	
18. On meeting a new person, s/he tends to move towards him or her	
24. Can make him/herself at home anywhere	
30. First reaction is to reject something new or unfamiliar to him/her	R
39. Moves towards new situations	
44. First response to anything new is to move his or her head toward it	

Parenting

Child Report Acceptance Item Text and Reverse Coding

1. Your mother made you feel better after talking over your worries with her	
6. Your mother understood your problems and your worries	
9. She smiled at you often	
12. She was able to make you feel better when you were upset	
14. She enjoyed doing things with you	
16. Your mother enjoyed working with you in the house or yard	
18. She comforted you when you were afraid	
19. She cheered you up when you were sad	

23. She had a good time at home with you	
24. She seemed proud of the things you did	

Parent Report Acceptance Item Text and Reverse Coding

1. You were not interested in changing this child, but liked him/her the way he/she was	R
2. You made this child feel better after talking over his/her worries with you	R
5. You saw this child's good points more than his/her faults	R
7. You almost always spoke to this child with a warm and friendly voice	R
10. You understood this child's problems and worries	R
12.You enjoyed talking things over with this child	R
15. You enjoyed going on drives, trips or visits with this child	R
18. You smiled at this child very often	R
21. You made this child feel better when he/she was upset	R
23. You enjoyed doing things with this child	R
26. You enjoyed working with this child in the house or yard	R
28. You comforted this child when he/she was afraid	R
29. You cheered this child up when he/she was sad	R
31. You often spoke to this child about the good things he/she did	R
34. You had a good time at home with this child	R
36. You were proud of the things this child did	R

Child Report Rejection Item Text and Reverse Coding

2. She wasn't very patient with you	R
4. She thought your ideas were silly	R
7. She forgot to help you when you needed help	R
10. She was always getting after you (or nagging you) about something	R
13. She almost always complained about what you did	R
17. She often blew her top when you bothered her	R
20. She didn't get you things unless you asked for them over and over again	R
21. Your mother didn't seem to know what you need or want	R
26. Your mother didn't work with you	R
28. She acted as though you were in the way	R

Parent Report Rejection Item Text and Reverse Coding

3. You were not very patient with this child	R
6. You thought this child's ideas were silly	R
8. You said this child was a big problem	R
11. You forgot to help this child when he/she needed it	R
13. You sometimes wished you didn't have children	R
16. You made this child feel he/she was not loved	R
17. You forgot to get this child things he/she needed	R
19. You were always getting after this child	R
22. You almost always complained to this child about what he/she did	R

24. You got cross and angry about little things this child did	R
27. You often blew your top when this child bothered you	R
30. You didn't get this child things unless he/she asked for them over and over again	R
32. You didn't seem to know what this child needed or wanted	R
35. You acted as though this child was in the way	R
37. You told this child to "quit hanging around the house and go somewhere"	R
39. You didn't work with this child	R

Child Report Inconsistent Discipline (Reversed) Item Text and Reverse Coding

3. She forgot a rule she made	
5. She punished you for doing something one day but ignored it the next	
8. She sometimes allowed you to do things she said were wrong	
11. It depended on your mother's mood whether a rule was enforced or not	
15. She only kept rules when it suited her	
22. She insisted you follow a rule one day and then forgot about it the next	
25. She changed her mind to make things easier for herself	
27. She frequently changed the rules you were supposed to follow	

Parent Report Inconsistent Discipline (Reversed) Item Text and Reverse Coding

4. You soon forgot a rule you had made	
9. You punished this child for doing something one day, but you ignored it the next day	
14. You sometimes allowed this child to do things you said were wrong	

20. It depended upon your mood whether a rule was enforced or not	
25. You only kept rules when is suited you	
33. You insisted that this child follow a rule one day and then you forgot about it the next	
38. You changed your mind to make things easier for yourself	
40. You frequently changed the rules this child was supposed to follow	

Coping

Child Report Active Coping Item Text and Reverse Coding

2. You told yourself that you could handle this problem	
6. You did something to make things better	
8. You told yourself that things would get better	
12. You tried to notice or think about only the good things in your life	
24. You told yourself that it would be ok	
28. You tried to understand it better by thinking about it more	
34. You thought about which things are best to do to handle the problem	
35. You told yourself you could handle whatever happens	
39. You did something to solve the problem	
44. You thought about what you could learn from the problem	
49. You thought about what you needed to know so you could solve the problem	
60. You reminded yourself about all the things you have going for you	

Child Report Avoidant Coping Item Text and Reverse Coding

4. You daydreamed that everything was okay	
9. You tried to ignore it	
14. You tried to stay away from the problem	
21. You imagined how you'd like things to be	
26. You tried to put it out of your mind	
31. You tried to stay away from things that made you feel upset	
37. You wished that bad things wouldn't happen	
42. You didn't think about it	
47. You avoided the people who made you feel bad	
53. You wished that things were better	
57. You just forgot about it	
62. You avoided it by going to your room	

Child Report Coping Efficacy Item Text and Reverse Coding

1. Overall, how successful have you been in handling your problems?	
2. Overall, how well do you think that the things you did worked to make your problem situations better?	
3. Overall, how well do you think that the things you did worked to make you feel better?	
4. Overall, how satisfied are you with the way you handled your problems?	
5. Overall, compared to other kids, how good do you think you have been in handling your problems?	
6. In the future, how good do you think that you will usually be in handling your problems?	
7. Overall, how good do you think you will be at making things better when problems come up in the future?	
8. Overall, how good do you think you will be at handling your feelings when problems come up in the future?	