

SOCIALIZATION OF COPING WITH PEER VICTIMIZATION AND NEGATIVE  
EMOTIONALITY: INTERACTIVE CONTRIBUTIONS TO CHILDREN'S RESPONSES TO  
STRESS AND DEPRESSIVE SYMPTOMS

BY

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DISSERTATION

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## ABSTRACT

This study examined the prospective, interactive contributions of parent socialization of coping and child negative emotionality to children's responses to peer aggression and depressive symptoms. Children ( $n = 289$ ,  $M$  age = 8.00,  $SD = .37$ ) and their parents completed questionnaires at two waves over a one-year period. Results revealed that active socialization of coping contributed to fewer depressive symptoms over time; specifically, secondary control engagement suggestions predicted fewer symptoms for all children, and disengagement coping suggestions predicted fewer symptoms for children with both high negative emotionality and high exposure to peer victimization. Active socialization of coping also contributed to less disengagement coping and fewer involuntary engagement responses, and these effects varied as a function of negative emotionality. Passive socialization of coping contributed to less primary control engagement coping and more disengagement coping, but only for youth with high negative emotionality. This research provides novel evidence that parents' responses to children's peer victimization experiences contribute to children's adjustment over time. In addition, this research suggests that the implications of socialization of coping for children's adjustment vary as a function of children's temperament-based negative emotionality.

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## INTRODUCTION

Peer victimization, or receiving intentional aggression from peers, is a prevalent stressor in middle childhood (Glover, Gough, Johnson & Cartwright, 2000; Hanish & Guerra, 2002; Rigby, 2000; Smith & Shu, 2000). Such experiences may range from minor and episodic forms of harassment (e.g., being teased) to severe and chronic maltreatment (e.g., being consistently excluded or physically harmed). Although peer victimization is associated with several adjustment problems, including compromised academic achievement, school avoidance, peer rejection, behavior problems, and aggression (Hannish & Guerra, 2002, Schwartz, McFayden-Ketchum, Dodge, Pettit, & Bates, 1998; for a review, see Card & Hodges, 2008), one meta-analysis suggested that victimization is most strongly related to depressive symptoms (Hawker & Boulton, 2000). Researchers have suggested that effective intervention programs must employ a comprehensive approach that establishes consistent responses to victimization from all parties involved, including parents as well as students and school staff (Hanish & Guerra, 2000; Card & Hodges, 2008). Yet, little is known about how parents respond to children's victimization experiences, or what types of responses are most effective in protecting children against emotional distress such as depression. This research examined the contribution of parent socialization of coping with peer victimization to children's adjustment, including effortful and involuntary responses to peer aggression and depressive symptoms.

In recent years, parenting researchers have become increasingly mindful of the child's contribution to the socialization process (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000). A sizeable body of research suggests that children's temperamental characteristics have implications for the association between parenting practices and children's adjustment (Bates, Petit, Dodge, & Ridge, 1998; Kochanska 1997; Kochanska, Aksan, & Joy,

2007; Lengua, 2008; Morris, Silk, Steinberg, Sessa, Avenevoli, & Essex, 2002; Sanson & Rothbart, 1995; Rubin, Burgess, Dwyer, & Hastings, 2003; Rubin, Burgess, & Hastings, 2002). Consistent with these contemporary perspectives on parenting, this research examined whether child temperament, specifically the tendency toward negative emotionality, moderated the contribution of socialization of coping to children's responses to peer aggression and depressive symptoms.

### Socialization of Coping with Peer Victimization

Investigations of the parent's role in children's victimization experiences have largely focused on parents' contributions to children's risk for experiencing heightened victimization (e.g., Finnegan, Hodges, & Perry, 1998; Ladd & Kochenderfer-Ladd, 1998; Perry, Hodges, & Egan, 2001; Rigby, 1994; Schwartz, Dodge, Petit, & Bates, 1997; 2000). One qualitative study found that parents often have trouble determining whether or not their child has experienced victimization, and when and how it is appropriate for parents to respond (Misha, Pepler, & Wiener, 2006). Other than findings indicating that parental involvement is correlated with intervention success (e.g., Eslea & Smith, 1998; Smith & Sharp, 1994), however, no studies have examined the prospective impact of parent responses to victimization.

When children are harassed by peers, parents may provide different types of resources that protect children from responding in maladaptive ways or from developing depressive symptoms. Research suggests that supportive versus harsh parenting, respectively, generally mitigate or heighten children's risk for depressive symptoms (for reviews, see Alloy, Abramson, Smith, Gib, & Neeren, 2006; Sheeber, Hops, & Davis, 2001). Compared to a negative parent-child relationship (e.g., high in negative affect, high in conflict), a supportive parent-child relationship (e.g., high in positive affect, low in conflict) may better protect victimized children

from developing depression by providing general resources to children, such as a safe haven in times of stress, heightened self-esteem, and positive expectancies about the self and world (Garber, Robinson, & Valentiner, 1997; Liu, 2003; Stark, Schmidt, & Joiner, 1996).

Beyond this general support, parents may provide children with specific resources by assisting children's efforts to cope with peer victimization (Abaied & Rudolph, 2010a; 2010b; Kliever, Fearnow, & Miller, 1996; Kliever et al., 2006). This research will investigate socialization of coping, or specific parent behaviors that communicate messages about how to cope with stress. Parents convey messages actively through explicit suggestions to children about how to cope with stress, as well as passively through their own responses to stress and their reactions to children's displays of distress (Abaied & Rudolph, 2010a; 2010b; Eisenberg, Fabes, & Murphy, 1996; Kliever et al., 1996; 2006). This investigation examined socialization of coping in the context of peer victimization experiences. Many but not all children experience peer victimization (Glover et al., 2000; Smith & Shu, 2000); however, the majority of children likely are exposed at times to at least mild harassment in the peer group. This research specifically assessed parent socialization responses when other children are mean to their child. This approach provides a comprehensive assessment of socialization of coping that addresses both mild everyday harassment in the peer group as well as more severe victimization.

To investigate active socialization of coping, this research drew from a theoretical framework developed by Compas and colleagues (Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000), which distinguishes between voluntary coping strategies and involuntary responses to stress. Voluntary responses are purposeful efforts to alleviate distress or to resolve stressors, whereas involuntary responses are thought to be automatic and dysregulated. Connor-Smith et al. (2000) also distinguish between engagement responses directed *toward*

stress or one's reactions to a stressor, and disengagement responses directed *away from* stress or one's reactions. This framework distinguishes between two types of engagement coping responses: primary control strategies, which are intended to address objective conditions including the stressor or one's negative emotions (e.g., problem solving, emotion expression, emotion regulation) versus secondary control strategies, which are intended to adapt the self to stressful conditions (e.g., cognitive restructuring, positive thinking, acceptance, distraction). Disengagement coping includes both cognitive and behavioral efforts to avoid or deny the existence of a stressor or one's resulting negative emotions. This contemporary framework addresses several limitations of the broader coping literature, providing precise, theoretically driven definitions of coping behaviors and eliminating confounds between the assessment of coping strategies and symptoms of psychopathology (Connor-Smith et al., 2000).

To investigate passive socialization of coping, this research drew from a theoretical framework developed by Fabes and colleagues (Fabes, Eisenberg, & Bernzweig, 1990; see also Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002; Smith et al., 2006). According to this framework, in addition to actively socializing coping strategies, parents may respond to children's distress by becoming upset themselves (distressed responses) or by harshly punishing or minimizing the validity of the child's distress (punitive responses). These responses represent more passive forms of socialization of coping in that they are directly relevant to children's coping process without communicating explicit messages about coping (Fabes et al., 2002; Smith et al., 2006). To achieve a comprehensive assessment of socialization of coping, this study investigated passive distressed and punitive responses as well as active engagement and disengagement suggestions.

#### *Consequences of Socialization of Coping with Victimization*



Parent socialization of coping often is aimed at resolving the child's distress by assisting the child's coping process; alternatively, parents may wish to minimize their exposure to the child's distress by distancing themselves from the child or halting the child's outward expression of negative affect (Eisenberg et al., 1996). As expected, a small body of research reveals that parent coping suggestions (Abaied & Rudolph, 2010a; 2010b; Kliewer et al., 1996; 2006; Miller, Kliewer, Hepworth, & Sandler, 1994) and distressed and punitive responses (Eisenberg et al., 1996; Smith et al., 2006) are indeed associated with children's responses to stress and subsequent depressive symptoms. However, research has not directly examined either parent socialization of coping in the specific context of peer victimization or whether children's responses to parent socialization account for the association between socialization of coping and depressive symptoms.

This research examined whether children's responses mediate, in part, the effects of socialization of coping on children's depressive symptoms. Low engagement coping, high disengagement coping, and high involuntary responses, which are typically considered maladaptive responses to stress, are associated with children's risk for depressive symptoms, whereas adaptive responses to stress are associated with reduced symptoms (for a review, see Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). Thus, effective socialization of coping might buffer children from developing depressive symptoms by reinforcing adaptive coping behaviors, and ineffective socialization of coping might place children at risk for developing depressive symptoms by stimulating maladaptive responses to stress. However, it is also possible that parent socialization efforts influence children's adjustment through alternate pathways, such as boosting or undermining self-esteem and fostering positive or negative expectancies about the self and the world. To investigate these possibilities, the present study

examined whether or not children's stress responses helped to account for the contribution of socialization of coping to subsequent depressive symptoms.

### Negative Emotionality as a Moderator of Socialization Effects

#### *Parenting x Temperament Interactions*

In recent years, researchers have widely acknowledged that the effects of parent socialization depend in part on the characteristics of the child (Collins et al., 2000; Sanson & Rothbart, 1995). Some have proposed that failure to examine interactions between parenting and child characteristics has masked the effects of parenting in empirical investigations, yielding relatively small effect sizes (Bates et al., 1998; Kochanska et al., 2007; Morris et al., 2002). Given that the effects of parenting on children's coping behavior in particular tend to be small (Power, 2004), this issue is relevant to the proposed investigation of socialization of coping.

Variations in children's temperament are thought to modulate the effects of parenting by shaping children's responses to parental actions. Temperament is typically conceived of as stable individual differences in self-regulation, affect, and reactivity to stimulation (Rothbart & Bates, 1998; Rothbart, Ahadi, & Evans, 2000). Contemporary conceptualizations of temperament emphasize that these individual differences evolve over time as result of interactions between biology and the environment, forming the basis for later personality traits (Caspi, Harrington, Milne, Amell, Theodore, & Moffitt, 2003; Caspi & Shiner, 2006; Caspi & Silva, 1995; Sanson & Rothbart, 1995; Shiner, Masten, & Roberts, 2003). Thus, individual differences that map onto traditional temperamental dimensions can be studied throughout childhood. The proposed investigation will examine whether temperament contributes to individual variability in children's responses to active and passive socialization of coping.

Multiple theoretical approaches have been proposed to account for the interaction between parenting and temperament. According to diathesis-stress models (Brozina & Abela, 2006; Mezulis, Hyde, & Abramson, 2006; Monroe & Simons, 1991), maladaptive temperamental characteristics serve as diatheses or vulnerability factors; stress or challenge (e.g., adverse parenting) is more likely to predict negative developmental outcomes for children with than without these characteristics. Similarly, desirable temperamental characteristics may protect children from the negative effects of certain parenting behaviors. Findings from a number of studies support this type of model. Research reveals that several dimensions of temperament (e.g., high levels of dysregulation, fearfulness, negative emotionality, and frustration; low levels of effortful control) interact with various forms of harsh parenting (e.g., negative dominance, hostility, rejection, and harsh, critical, or inconsistent discipline), such that harsh parenting only predicts heightened externalizing symptoms in children with high temperamental vulnerability (Colder, Lochman, & Wells, 1997; Lengua, 2008; Morris et al. 2002; Rubin, Hastings, Chen, Stewart, & McNichol, 1998). Furthermore, Rubin et al. (2002) found that maternal criticism/derision predicted social withdrawal only among children with heightened fearful inhibition, and Morris et al. (2002) found that psychological control predicted depressive symptoms only among children with high negative emotionality. Collectively, these studies support the idea that negative parenting behaviors more strongly predict problematic outcomes for children with maladaptive temperaments than for children with adaptive temperaments.

As an alternative perspective, “goodness-of-fit” models propose that temperamental characteristics only constitute a vulnerability if they are incompatible with the child’s environment. This type of model was first proposed by Thomas and Chess (1977); more recently, adaptations have emerged, such as Kochanska’s (1993) “multiple pathways” model (see also

Kochanska et al., 2007). According to this perspective, a particular parenting behavior may be appropriate for some children (and predictive of positive outcomes), but poorly suited to the needs of other children (and predictive of negative outcomes or unrelated to any outcomes, positive or negative). For example, in a series of studies, Kochanska and colleagues have found that different parenting behaviors are effective for the moral socialization of temperamentally fearful versus fearless children (Kochanska, 1991; 1995; 1997; Kochanska et al., 2007). Some support also exists for a goodness-of-fit model predicting symptoms. Lengua (2008) found that levels of anxiety/fearfulness and frustration moderated the associations between parenting (physical punishment and inconsistent discipline) and externalizing and internalizing symptoms.

It is likely that different conceptual models of parenting x temperament interactions apply to different dimensions of parenting. Evidence of a diathesis-stress model typically has emerged for negative parenting in the relative extreme, such as high negative affect or hostility directed toward the child (Morris et al., 2002), criticism/derision of the child (Rubin et al., 2002), harsh discipline (Colder et al., 1997), or rejection (Lengua, 2008). These parenting behaviors are relatively non-normative and unlikely to be compatible with any temperamental profile; thus one would expect the effects of these parenting behaviors to be consistently negative, but perhaps mitigated or exacerbated by temperament. Studies finding evidence of a goodness-of-fit model have examined individual variability primarily within the boundaries of normative parenting, such as use of fear inductions in moral socialization (Kochanska et al., 1997; 2007), minor physical punishment, or inconsistent discipline (Lengua, 2008). One study that included both severe and moderately negative parenting behaviors in fact found support for both models (Lengua, 2008). Because the process of interaction between parenting and temperament perhaps

depends on the extremity of the parenting behavior in question, the proposed investigation will take into account both perspectives.

### *The Role of Negative Emotionality*

In particular, the present research focused on the moderational role of negative emotionality, a dimension of temperament that includes the tendency to experience frequent, heightened negative emotions (e.g., sadness and anger) and to have difficulty being soothed when upset or aroused (Rothbart & Bates, 1998). Negative emotionality, a form of emotional reactivity, is thought to shape children's likelihood of experiencing heightened negative affect in response to the environment, including parenting behaviors. Given the present focus on parent socialization of coping in response to the arousing, stressful experience of peer victimization, children's dispositional negative emotionality likely influences how children respond. Specifically, negative emotionality is expected to shape the consequences of socialization of coping for children's responses to peer aggression and depressive symptoms.

Indeed, research links negative emotionality to children's responses to stress as well as to depressive symptoms. Low negative emotionality is associated with more constructive (i.e., engagement) responses, whereas high negative emotionality is associated with more avoidant (i.e., disengagement) responses (Eisenberg, Fabes, Nyman, Bernzweig, & Pinuelas, 1994; Lengua & Long, 2002). Negative emotionality also is associated with heightened depressive symptoms concurrently (Eisenberg et al., 2001; Lengua, West, & Sandler, 1998; Lengua & Long, 2002; Morris et al., 2002; for a review, see Clark, Watson, & Mineka, 1994) and longitudinally (Brengden, Wanner, Morin, & Vitaro, 2005; Goodyer, Ashby, Altham, & Vize, 1993). These findings provide support for the relevance of negative emotionality to the process through which children develop responses to stress and depressive symptoms.

*Contribution of Socialization of Coping x Negative Emotionality Interactions to Responses to Peer Aggression and Depressive Symptoms*

*Primary control engagement suggestions.* Consistent with a goodness-of fit-model, primary control engagement suggestions may be beneficial for children with low negative emotionality but not for children with high negative emotionality. Primary control engagement suggestions (e.g., problem solving, emotion regulation, confiding in others about emotions) are expected to help children low in negative emotionality keep peer victimization and emotional distress in check, thereby protecting them from developing depressive symptoms. Specifically, for children with low negative emotionality, primary control engagement suggestions are expected to predict higher levels of primary control engagement coping and lower levels of depressive symptoms.

Indeed, primary control engagement coping is associated with fewer depressive symptoms in children (for a review, see Compas et al., 2001). Children with low negative emotionality are unlikely to suffer extreme emotional reactions to peer victimization, which would allow them to devote resources to skillfully problem solve or regulate their emotions. Thus, it is possible that these children will respond to primary control engagement suggestions by using primary control engagement coping, which might in turn mediate the negative association between primary control suggestions and depressive symptoms. Yet, primary control engagement suggestions might also communicate to the child that the parent believes problems with peers are surmountable with effort and that the child is capable of managing his or her own emotions and stressors. Consequently, primary control engagement suggestions could protect children from developing symptoms of depression independent of their responses to peer aggression.

In contrast, consistent with a goodness of fit model, primary control engagement suggestions might be less relevant to the development of responses to peer aggression and depressive symptoms among children with high negative emotionality. Children with high negative emotionality are predisposed to experience extreme, persistent negative arousal in response to even relatively mild peer harassment, making primary control engagement strategies, such as emotion regulation and well-planned problem solving, particularly daunting and uncomfortable. Due to their discomfort and lack of skill, children with high negative emotionality might be less responsive to primary control engagement suggestions compared to children with low negative emotionality. Thus, primary control engagement suggestions were not expected to predict responses to peer aggression or depressive symptoms among children with high negative emotionality.

*Secondary control engagement suggestions.* Secondary control engagement suggestions are expected to be beneficial for all children regardless of negative emotionality. The goal of secondary control coping strategies is to manage stress by adapting oneself to one's emotions or environment (Compas et al., 2001), a particularly important skill given that peer victimization typically takes place in unavoidable environments (e.g., school, daycare, afterschool activities). These strategies include thinking positively (e.g., laughing about the problem, reassuring oneself), thinking flexibly (e.g., thinking about lessons learned from the experience), and distracting oneself with alternative thoughts or activities to reduce negative arousal. Secondary control coping is associated with fewer depressive symptoms in children (for a review, see Compas et al., 2001). Similar to primary control suggestions, secondary control suggestions communicate to children that it is possible to work through distress associated with peer victimization, potentially boosting children's positive appraisals and self-efficacy. Furthermore,

compared to primary control coping strategies, secondary control coping strategies represent less resource-intensive means of engaging with a stressor that may be particularly well suited to the needs of children with high negative emotionality. For example, although it may be difficult for children who react to victimization with extreme, persistent negative affect to effectively confront an aggressor, reassuring oneself or doing something fun may be more practical strategies for overcoming their distress. In this way, secondary control coping suggestions may provide children with high negative emotionality with coping resources that are better suited to their abilities and help them manage their limitations in the face of peer victimization. Children were expected to respond to secondary control suggestions by enacting secondary control coping behavior. In turn, secondary control coping may contribute to the negative association between secondary control suggestions and depressive symptoms. However, it is also possible that secondary control suggestions contribute to depressive symptoms independently of children's responses, by fostering children's self esteem and coping efficacy in the face of peer victimization.

*Disengagement suggestions.* Disengagement coping suggestions were expected to predict maladaptive responses to peer aggression and heightened depressive symptoms in children with low negative emotionality. When parents encourage children to avoid or deny peer victimization-related stress, they fail to provide children with resources to directly address stressful circumstances or ensuing negative emotions. Frequent parental encouragement to avoid stress also could socialize children to appraise peer victimization as too difficult to manage directly. Without adequate resources or motivation to address peer victimization, children will be vulnerable to escalating and potentially overwhelming distress. As a result, disengagement suggestions were expected to foster not only disengagement coping and depressive symptoms,



but also involuntary responses to peer aggression. Indeed, previous research has revealed that both mothers' disengagement suggestions (Abaied & Rudolph, 2010b) and disengagement coping (Primo et al., 2000) predict involuntary responses to stress over time. Furthermore, disengagement coping is associated with heightened depressive symptoms in youth (Compas et al., 2001), and disengagement coping suggestions are particularly predictive of heightened symptoms when children experience high levels of stress (Abaied & Rudolph, 2010a).

It is possible that maladaptive responses to peer aggression partly account for the positive association between disengagement suggestions and depressive symptoms among children with low negative emotionality. For example, if disengagement suggestions make peer victimization seem too tough to manage, even children with adequate temperamental resources to engage with stress may choose to disengage or experience involuntary responses instead. However, parental encouragement to disengage may also communicate to children that peer victimization is too difficult for the child to manage, increasing children's vulnerability by undermining children's self esteem and coping self-efficacy or amplifying children's negative appraisals of peer victimization.

Consistent with a goodness of fit model, children with high negative emotionality were expected to benefit from disengagement suggestions. In light of their heightened reactivity and arousal, children with high negative emotionality approach each stressful event with fewer resources available for adaptive, purposeful coping. Parental encouragement to disengage from stress may prevent children with high negative emotionality from becoming overwhelmed by their own intense emotional reactions, giving them additional time to gather their resources and ultimately protecting them from developing involuntary responses to peer aggression and depressive symptoms. Children with low negative emotionality, however, typically experience

only mild arousal, and were not expected to reap this benefit. In this way, disengagement suggestions perhaps present a good fit to the unique coping needs of highly reactive children, particularly in the context of frequent, severe peer victimization.

In sum, disengagement suggestions were expected to predict higher levels of disengagement coping and lower levels of involuntary engagement, involuntary disengagement, and depressive symptoms among children with high negative emotionality. As discussed earlier, disengagement suggestions may predict fewer depressive symptoms via children's responses to peer aggression. Alternatively, disengagement suggestions might protect children with high negative emotionality via alternate pathways, such as fostering children's sense of control, agency, or efficacy in the face of peer victimization stress.

*Distressed responses.* Parental displays of negative arousal (e.g., becoming visibly upset) in response to children's exposure to victimization were expected to predict maladaptive responses to peer aggression and heightened depressive symptoms in children. Fabes and colleagues (2002) conceptualize distressed responses as unsupportive because they perpetuate or even worsen children's negative arousal rather than assist children's coping (see also Eisenberg et al., 1996). Similar to disengagement suggestions, parent distressed responses might suggest to children that peer victimization is a particularly severe stressor; a child might conclude that if victimization overwhelms even their parents' abilities to self-regulate, victimization must surely be too difficult for the child to manage on his or her own. High levels of distressed responses also fail to provide children with resources for effective voluntary coping with stress. As a result, distressed responses from parents were expected to undermine children's coping and to perpetuate children's own distress. Specifically, distressed responses were expected to predict

lower levels of engagement coping and higher levels of disengagement coping, involuntary responses to peer aggression, and depressive symptoms.

Previous research provides support for these predictions. Maternal distressed responses to children's general distress are concurrently associated with children's heightened emotional arousal (Eisenberg & Fabes, 1994) and dysregulated emotional reactivity (Fabes, Leonard, Kupanoff, & Martin, 2001), and are prospectively associated with children's decreased behavioral regulation (Eisenberg et al., 1999). Distressed responses and maternal expression of negative emotion also are concurrently and longitudinally associated with children's heightened internalizing symptoms (Eisenberg, Fabes, Shepard, Guthrie, Murphy, & Reiser, 1999; Eisenberg et al., 2001; 2003; Valiente, Fabes, Eisenberg, & Spinrad, 2004). Furthermore, Eisenberg et al. (2001) found that children's emotional and behavioral regulation mediated the relationship between maternal negative expressivity and children's externalizing symptoms.

Consistent with a diathesis-stress model, the positive associations between distressed responses and adjustment difficulties (i.e., maladaptive responses to peer aggression and depressive symptoms) were expected to be stronger for children with high compared to low negative emotionality. Children with high negative emotionality were expected to have particularly strong adverse reactions to parent distress. For example, due to their predisposition toward negative emotional reactivity, these children are likely to experience extreme negative arousal in response to parent distress without the skills to down-regulate. As a result, these children are especially likely to become predisposed to rumination or intrusive thoughts about the problem (involuntary engagement) and have fewer resources available for problem-solving or positive thinking (primary and secondary control engagement). In addition, their overwhelming arousal may predispose them toward eventual emotional numbing or escape

behaviors (involuntary disengagement) or to purposefully avoid stressful experiences (disengagement coping), which they will find particularly upsetting. In sum, distressed responses were expected to be linked more strongly to maladaptive responses to peer aggression and depressive symptoms in children with high compared to low negative emotionality. Responses to peer aggression might partly mediate the link between parents' distressed response and depressive symptoms. Alternatively, distressed responses might contribute to heightened depressive symptoms in children via other pathways, such as undermining children's coping efficacy by making peer victimization seem so overwhelming that even parents cannot control their negative reactions.

*Punitive responses.* Punitive responses were expected to interfere with children's effective responses to peer aggression and to foster depressive symptoms. Fabes et al. (2002) propose that when parents react to children's distress with punishment, they are attempting to halt the child's distress without providing assistance or guidance about self-regulation. Punitive responses are an example of parental rejection, in that these responses implicitly communicate to children that their negative feelings are not valid and parents are unwilling to assist children's recovery. Similar to distressed responses, punitive responses to children's distress are thought to intensify children's negative arousal (Eisenberg et al., 1996), and thus predispose children to involuntary responses to stress and ultimately leave children vulnerable to depressive symptoms. Supporting these predictions, punitive responses are associated with higher levels of teacher-rated emotional dysregulation (Jones, Eisenberg, Fabes, & MacKinnon, 2002), more intense observer-rated emotional expression (Fabes et al., 2001), and heightened depressive symptoms in children (for reviews, see Alloy et al., 2006; Sheeber et al., 2001). Punitive responses also were expected to contribute to children's voluntary responses to peer aggression. Given that punitive

responses fail to provide children with resources for confronting or adapting to stress, punitive responses were expected to undermine children's purposeful engagement and instead foster disengagement coping. For example, children may choose to ignore rather than express their negative feelings about being victimized to avoid receiving punishment from their parents. Indeed, parents' punitive responses are associated with children's more frequent use of disengagement coping and less frequent use of engagement coping (Eisenberg et al., 1996).

Consistent with a diathesis-stress model, the associations between punitive responses and adjustment difficulties (maladaptive responses to peer aggression, heightened symptoms), were expected to be stronger in children with high compared to low negative emotionality. Emotionally reactive children were expected to be more sensitive to the negative effects of punitive responses due to their compromised ability to regulate negative emotions in response to arousing parenting behavior. Studies examining interactions between harsh or punitive parenting and temperamental dysregulation indeed support a diathesis-stress model. For example, Rubin et al. (1998) found that high temperamental dysregulation and high negative-dominant parenting behavior (i.e., placing intrusive and controlling demands upon the child) interacted to predict externalizing symptoms. Similarly, Morris et al. (2002) found that maternal psychological control predicted heightened depressive symptoms, and maternal hostility predicted heightened externalizing symptoms, only in children with high negative emotionality. Similar to distressed responses, punitive responses may predict heightened depressive symptoms via children's responses to peer aggression or via alternate mechanisms, such as undermining children's coping efficacy or making children feel as though they have done something wrong.

*Alternate pathways.* It is possible that parent socialization of one type of effective response strategy will provide children with enough resources to create a 'spill-over' effect,

helping children to engage in higher levels of other effective strategies and lower levels of ineffective strategies. Similarly, maladaptive parent socialization behaviors potentially undermine children's effective coping strategies and predispose children toward ineffective responses. Previous investigations reveal several examples of both corresponding and spill-over effects. Primary control engagement suggestions are concurrently associated with higher levels of primary control engagement coping (Kliewer et al., 2006), higher levels of secondary control engagement coping (e.g., distraction; Kliewer et al., 1996), and lower levels of disengagement coping (Eisenberg et al., 1996). Secondary control suggestions (e.g., distraction, cognitive restructuring) are positively associated with maternal reports of children's secondary control coping both concurrently and longitudinally (Miller et al., 1994) and are positively associated with children's use of primary control engagement coping (e.g., problem solving by seeking support from others; Kliewer et al., 1996). Primary and secondary control engagement suggestions combined also predict less involuntary disengagement over time (Abaied & Rudolph, 2010b). Finally, disengagement suggestions are negatively associated with children's effortful engagement coping (Abaied & Rudolph, 2010b; Kliewer et al., 1996), and are positively associated with involuntary engagement over time (Abaied & Rudolph, 2010b). Consequently, contributions of each dimension of socialization of coping to each dimension of responses to peer aggression were explored.

#### Moderating Effect of Heightened Peer Victimization

Previous research suggests that contextual factors may influence the effects of socialization of coping on children's responses to stress and depressive symptoms (Abaied & Rudolph, 2010a; 2010b). Because the proposed investigation focuses on the interpersonal context of peer victimization, the child's level of exposure to victimization may be relevant.

Considerable variability exists in the frequency, severity, and duration of peer victimization experiences (Glover et al., 2000; Hanish & Guerra, 2002; Rigby, 2000; Smith & Shu, 2000), which may range from mild harassment to severe maltreatment. It is possible that children who experience frequent aggression from peers will have a greater need for coping resources compared to children who experience milder forms of harassment. As a result, children who must respond to peer victimization more frequently might be more sensitive to the effects of parent suggestions about how to cope, whereas parent suggestions to children experiencing mild or infrequent victimization might have a negligible impact on children's responses or depressive symptoms. Consistent with this idea, Abaied and Rudolph found that disengagement coping suggestions predicted heightened depressive symptoms (2010a) and maladaptive responses to stress (2010b) only among youth experiencing high interpersonal stress. Alternatively, socialization of coping may still be important in the absence of severe victimization because most children are exposed to mild everyday peer harassment. In addition, the effects of parent socialization of coping with peer victimization may extend beyond children's responses in the peer context to other domains of life stress, making children's exposure to victimization less relevant. Furthermore, given their proneness to reactivity and arousal, children with high negative emotionality may be reactive to even relatively mild peer harassment. To explore these possibilities, children's exposure to peer victimization was examined as a moderator of the hypothesized interactive contribution of socialization of coping and negative emotionality to children's responses to peer aggression and depressive symptoms.

## Study Overview

### *Goals and Hypotheses*

The primary goals of this research were:

- A. To examine the effects of parent socialization of coping with peer victimization on children's responses to peer aggression and depressive symptoms.
- B. To examine whether negative emotionality moderates the above associations.
- C. To examine whether children's responses to peer aggression partially mediate the socialization of coping x temperament contributions to depressive symptoms.
- D. To examine whether children's exposure to peer victimization moderates the above associations.

To address these goals, several hypotheses were tested longitudinally:

#### 1. Predicting Symptoms

- a. Primary control suggestions will predict fewer depressive symptoms in children with low negative emotionality but not in children with high negative emotionality.
- b. Secondary control suggestions will predict fewer depressive symptoms regardless of negative emotionality.
- c. Disengagement suggestions will predict heightened depressive symptoms for children with low negative emotionality and fewer depressive symptoms for children with high negative emotionality.
- d. Distressed responses will predict heightened depressive symptoms, and these associations will be stronger in children with high than low negative emotionality.
- e. Punitive responses will predict heightened depressive symptoms, and these associations will be stronger in children with high than low negative emotionality.

#### 2. Predicting Responses to Peer Aggression

- a. Primary control suggestions will predict:



- i. Heightened primary control coping in children with low but not high negative emotionality.
  - b. Secondary control suggestions will predict:
    - i. Heightened secondary control coping regardless of negative emotionality.
  - c. Disengagement coping suggestions will predict:
    - i. Heightened disengagement coping and involuntary responses in children with low negative emotionality.
    - ii. Heightened disengagement coping and fewer involuntary responses in children with high negative emotionality.
  - d. Distressed reactions will predict:
    - i. Fewer primary and secondary control engagement responses and heightened disengagement coping and involuntary responses, and these associations will be stronger in children with high than low negative emotionality.
  - e. Punitive reactions will predict:
    - i. Fewer primary and secondary control engagement responses and heightened disengagement coping and involuntary responses, and these associations will be stronger in children with high than low negative emotionality.
- 3. Peer victimization will moderate the contribution of Parenting x Temperament interactions to responses to peer aggression and depressive symptoms. Specifically, the above associations (Hypotheses 1 and 2) will be stronger in the context of high than low peer victimization (although it is possible that Parenting x Temperament interactions will

contribute to responses to peer aggression and depressive symptoms regardless of children's exposure to victimization).

## METHOD

### *Participants*

Participants were drawn from a sample of 433 families who represent the first cohort of the University of Illinois Social Health and Relationship Experiences (SHARE) Project, a longitudinal study of peer victimization. The original sample ( $n = 373$ ) was recruited at schools in the greater Champaign-Urbana area. Of the eligible children, 76% participated in the initial wave of the study. Nonparticipants and participants did not significantly differ in terms of sex [ $\chi^2(1) = .25, ns$ ], age [ $t(492) = .18, ns$ ], ethnicity [white vs. minority;  $\chi^2(1) = .00, ns$ ], or school lunch status [an index of socioeconomic status: full pay vs. subsidized;  $\chi^2(1) = .16, ns$ ]. At the second wave of the study, an additional 60 classmates of the participants were recruited. Because the measures of socialization of coping were available beginning at the second wave of the longitudinal study, this study involved the second and third waves, referred to as Wave 1 ( $W_1$ ) and Wave 2 ( $W_2$ ).

Of the 433 participants, 69% had parent data at Wave 1; of those, 96% ( $n = 289$ ) had relevant data at Wave 2. Children with relevant data ( $M = 8.99, SD = .37$ ) were slightly, but not meaningfully, younger than children without data ( $M = 9.12, SD = .39$ ;  $t(431) = -3.46, p < .01$ ), but did not significantly differ from those without data in terms of sex [ $\chi^2(1) = 2.79, ns$ ], ethnicity [ $\chi^2(1) = 2.16, ns$ ], or school lunch status [ $\chi^2(1) = 2.26, ns$ ].

Children were in 3<sup>rd</sup> grade at Wave 1 ( $M$  age = 8.93,  $SD = .37$ ; 167 girls, 122 boys; 74.7% White, 15.6% African American, 9.7% other). The majority (94.1%) of those with participating parents lived with their biological mothers (3.1% adoptive mothers, 1.4% stepmothers, 1.4% other or unknown). Of the 289 participating families, 282 mothers and 7 fathers completed the parent questionnaires. Analyses including and excluding fathers revealed a

virtually identical pattern of results; thus, fathers were included in the sample. The participants came from a wide range of socioeconomic classes as represented by annual income (25.3 % below \$30,000; 29.5% \$30,000 - \$59,999; 26.7% \$60,000 - \$89,999; 18.4% over \$90,000).

### *Procedure*

Consent forms were distributed to second graders in seven local schools inviting children and their caregivers to participate in the longitudinal study. Consent for child participation included permission to collect information from his or her teacher. Two assessments were conducted approximately one year apart. Trained graduate students, undergraduate students, and project staff attained verbal assent from children and administered questionnaires to small groups during two classroom sessions in the winter of each year. Researchers read questions aloud while children provided written responses. Children received small gifts as a token of appreciation for their participation. Questionnaires were sent to caregivers by mail, and were either returned by mail or collected during home visits. Caregivers received a monetary compensation for their participation. Questionnaires were distributed to each child's teacher at the end of the fall semester and returned to a locked box in each school to ensure confidentiality. Teachers received a monetary compensation for each packet they completed, and each participating classroom received a monetary honorarium.

### *Measures*

Table 1 displays descriptive statistics and psychometric information for the measures.

*Maternal socialization of coping – General measure.* Parents completed a 24-item measure tapping suggestions that mothers commonly make to their children about how to cope with peer victimization experiences. The measure was designed to include coping suggestions appropriate from middle childhood to adolescence; items were created in accordance with the

engagement-disengagement framework of voluntary responses to stress (Compas et al, 2001). Parents responded to the prompt: “When other children are mean to your child, how much do you do each of the following?” Parents rated each item on a 5-point scale (*Not at all* to *Very much*). The measure includes coping suggestions that tap each type of voluntary coping response represented in the engagement-disengagement framework: primary control engagement (problem solving, emotion regulation, emotion expression), secondary control engagement (positive thinking, cognitive restructuring), and disengagement (cognitive and behavioral avoidance).

This measure was adapted from Abaied and Rudolph’s (2010a; 2010b) Socialization of Coping Questionnaire. To provide a more comprehensive assessment of socialization of coping for the current version, several additional items were adapted from the primary control engagement, secondary control engagement, and disengagement coping subscales of the Responses to Stress Questionnaire (RSQ; Connor-Smith, Compas et al., 2000). In addition, several items were shortened or reworded for clarity, or dropped due to lack of conceptual relevance to the present study.

To examine the factor structure of the measure, a principal components factor analysis with an oblimin rotation was conducted. One item, “Encourage my child to deal with the problem head on rather than ignoring it,” was dropped due to poor factor loadings. The subsequent analysis yielded four factors: *Cognitive Distraction*, *Primary Control Engagement*, *Secondary Control Engagement*, and *Behavioral Disengagement*, accounting for 56% of the variance (see Appendix A). All factor loadings were greater than .39, and cross-loadings were low (average cross-loading = .11). Scores were calculated as the mean of the items on each subscale, with higher scores reflecting higher frequency of each type of coping suggestion. Consistent with previous investigations of socialization of coping (Abaied & Rudolph, 2010a;

2010b) and children's coping behavior (Sandler, Tein, & West, 1994; Sandler, Tein, Mehta, Wolchik, & Ayers, 2000; Zimmer-Gembeck & Locke, 2007), the subscales showed small to moderate positive correlations (see Table 2), suggesting individual differences in base rates of coping suggestions made to children.

*Maternal socialization of coping – Situational measure.* Parents completed an adapted version of the Coping with Children's Negative Emotions Scale (CCNES; Fabes et al., 1990). The CCNES is a self-report measure designed to assess parent reactions to children's displays of negative emotion. The original measure presents parents with a series of twelve hypothetical scenarios involving children's negative emotions and asks them to rate the likelihood that they would respond in several different ways for each scenario on a 7-point scale (*Very Unlikely* to *Very Likely*). For the proposed investigation, the measure was adapted to assess parent reactions to children's displays of negative emotion in the specific context of peer victimization. To include only examples of peer victimization and to be age-appropriate for a school-age sample, two scenarios from the original measure were slightly reworded, and an additional four were written. The scenarios included two examples each of verbal (e.g., being teased), relational (e.g., others spreading rumors), and physical (e.g., pushing, shoving) victimization.

The revised measure used in the current study includes six subscales assessing different dimensions of parent responses. Four subscales assessed active socialization of coping (*Primary Control Engagement*, *Secondary Control Engagement*, *Behavioral Disengagement*, *Expressive Encouragement*), and two subscales assessed passive socialization of coping (*Distressed Reactions*, *Punitive Reactions*). Two of the subscales represented shortened versions of original scales from the CCNES: *Expressive Encouragement* (6 items; encouraging children to express negative emotion) and *Distressed Reactions* (6 items; parents' experiencing distress in response

to children's negative emotion). Also included was a *Punitive Reactions* scale, which included four items from the original *Punitive Reactions* scale (scolding or punishing children for expressing negative emotions), and two items from the original *Minimizing Reactions* scale (minimizing children's negative emotions or devaluing the underlying problem). This approach is consistent with prior investigations, which have found that Punitive and Minimizing Reactions are highly correlated and/or form a single factor (Denham & Kochanoff, 2002; Eisenberg & Fabes, 1994; Jones et al., 2002). The two remaining original scales of the CCNES, *Problem-Focused Reactions* and *Emotion-Focused Reactions*, were designed according to Folkman and Lazarus' (1990) coping framework and reflect parental assistance and encouragement of children's efforts to resolve the underlying problem or the child's negative emotions, respectively. To tap coping suggestions using the more contemporary theoretical framework proposed by Compas and colleagues (Connor-Smith et al., 2000), these scales were revised to represent *Primary Control Engagement* (6 items; encouraging problem solving and emotion regulation) and *Secondary Control Engagement* (6 items; encouraging positive thinking). Additionally, in light of Compas and colleagues' framework, a sixth subscale tapping *Behavioral Disengagement* (6 items; encouraging avoidance) was added. Items for the three new subscales were adapted into parent coping suggestions from the Responses to Stress Questionnaire (RSQ; Connor-Smith et al., 2000). Some additional items were written to tap specific examples of coping not included in the RSQ. Finally, because many of the original CCNES items directly refer to the original scenarios, some were reworded to be consistent with the new peer victimization scenarios. A list of the items appears in Appendix B.

Scores were calculated as the mean of the items on each subscale, with higher scores reflecting higher frequency of each type of parental response to victimization. The internal and

test-retest reliability, construct validity, and predictive validity of the original CCNES are well supported among early and middle childhood samples (e.g., Cassano, Perry-Parish, & Zeman, 2007; Eisenberg et al., 1996; Fabes et al., 2002; Nelson, O'Brien, Blankson, Calkins, & Keane, 2009; Smith et al., 2006).

*Socialization of coping measure aggregation.* Table 2 displays the intercorrelations among the mean scores of the active socialization subscales from the two socialization of coping measures. Moderate correlations were found between subscales that tapped similar socialization responses. To examine whether the subscales on the two measures tapped higher-order socialization of coping factors, the subscales were entered into a principal components factor analysis with an oblimin rotation. This analysis yielded three factors accounting for 72% of the variance (see Table 3). The first was a *Primary Control Engagement* factor, which included situational expressive encouragement, situational primary control, and general primary control. The second was a *Disengagement* factor, which included general behavioral disengagement and situational behavioral disengagement. The third was a *Secondary Control Engagement* factor, which included situational secondary control, general secondary control, and general cognitive distraction. All factor loadings were greater than .57 and cross-loadings were generally small (average cross-loading = .12). The general cognitive distraction subscale had a cross-loading of .50 on the disengagement factor; however, in light of a stronger loading on the secondary control factor and conceptual consistency, a decision was made to interpret this subscale as a dimension of secondary control. The general and situational scores were standardized and averaged within dimensions of coping socialization based on the factor analysis, yielding three active socialization of coping scores: Primary Control Engagement ( $\alpha = .89$ ), Secondary Control Engagement ( $\alpha = .86$ ), and Disengagement ( $\alpha = .84$ ). Distressed Responses ( $\alpha = .92$ ) and



Punitive Responses ( $\alpha = .78$ ), which represent passive forms of coping socialization, were retained as a separate scores.

*Temperament.* To assess children's temperament, caregivers completed a subset of the subscales from the Temperament in Middle Childhood Questionnaire (Simonds, Kieras, Rueda, & Rothbart, 2007; Simonds & Rothbart, 2004). The present investigation focused on three subscales tapping children's negative emotionality, including the tendency to experience intense sadness (10 items), anger (7 items), and difficulty resolving intense emotions (low soothability; 8 items; see Appendix C).

Caregivers rated each item on a 5-point scale (*Almost Always Untrue* to *Almost Always True*). Items on the soothability subscale were reverse-coded such that higher scores reflected higher difficulty recovering from negative emotions (i.e., low soothability). The low soothability, sadness, and anger scales were strongly correlated ( $r_s \geq .60$ ,  $p_s < .001$ ). Scores were computed as the mean of all sadness, anger, and soothability items, such that higher scores reflect higher levels of negative emotionality. Previous investigations have found that parent reports of children's temperament are reliable (Rothbart, Ahardi, Hershey, & Fisher, 2001; Simonds & Rothbart, 2004; Simonds et al., 2007) and stable (Rothbart et al., 2001), and correlate with child reports (Lengua, 2003; Simonds & Rothbart, 2004; Simonds et al., 2007), behavioral observations (Wilson, 2006), and laboratory tasks (Simonds et al., 2007) during early and middle childhood.

*Depressive symptoms.* Children reported on their depressive symptoms using the short form of the Mood and Feelings Questionnaire (SMFQ; Angold, Costello, Messer, & Pickles, 1995). This measure includes 13 items describing recent depressive symptoms (see Appendix D). The items were selected based on their ability to discriminate between clinically depressed and

nondepressed children (Angold et al., 1995), and are more depression-specific than items found on other measures of children's depressive symptoms (Kuo, Vander Stoep, & Stewart, 2005). The response format of the measure was revised from a 3-point (*Never to Always*) to a 4-point (*Not at All to Very Much*) scale (see Liang & Eley, 2005). Scores were computed as the mean of the items, with higher scores reflecting heightened depressive symptoms. The SMFQ has strong internal consistency in both clinical (Angold et al., 1995) and community (Sharp, Goodyer, & Croudace, 2006) samples, and has strong convergent and discriminant validity (Angold et al., 1995).

*Responses to peer aggression.* Children completed a revised version of the Responses to Stress Questionnaire (RSQ; Connor-Smith et al., 2000). The original probe of the measure was revised to assess children's responses to peer aggression. Children were prompted to report how they respond when other children are mean to them, and this prompt was repeated after every five items. Children indicated how often they engaged in each response by checking a box on a 4-point scale (*Not at All to Very Much*).

The original measure is composed of 57 items distributed across 19 subscales tapping four dimensions of responses to stress: (a) engagement coping, which includes primary control engagement (e.g., problem solving, emotion regulation) and secondary control engagement (e.g., positive thinking, cognitive restructuring), (b) disengagement coping (e.g., denial, avoidance, and wishful thinking), (c) involuntary engagement (e.g., rumination, emotional arousal, and physiological arousal), and (d) involuntary disengagement (e.g., involuntary avoidance, inaction, and emotional numbing).

To adapt the measure for younger children, minor wording changes were made to shorten and clarify items, and a shorter version of the measure was constructed. Item-total correlations

for the original measure were examined by subscale in two samples of youth (Connor-Smith et al., 2000; Flynn & Rudolph, 2007), and the two highest loading items on each subscale were retained. When items loaded in different patterns across the two samples, items were selected based on their relevance to understanding responses to peer aggression or based on the sample closer in age to the current participants. The revised measure dropped one item from each of the 19 subscales, with the exception of the disengagement coping<sup>1</sup> subscales, yielding a 41-item measure (see Appendix E) that retained the same overarching dimensions: (a) engagement coping (6 primary control items; e.g., “I do something to try to fix the problem or take action to change things.” “I do something to calm myself down.”; 8 secondary control items; e.g., “I think about all the things I’m learning, or something good that will come from the problem.” “I think of ways to laugh about it so it won’t seem so bad.” “I realize I just have to live with things the way they are.”), (b) disengagement coping (9 items; e.g., “I try to believe it never happened.” “I try not to think about it, to forget all about it.” “I wish that someone would just come and get me out of the mess.”), (c) involuntary engagement (10 items; e.g., “I keep remembering what happened or can’t stop thinking about what might happen.” “Right away I feel really angry, sad, scared, or worried.” “I feel sick to my stomach or get headaches.”), and involuntary disengagement (8 items; e.g., “I just have to get away, I can’t stop myself.” “I can’t seem to get around to doing things I am supposed to do.” “I don’t feel like myself, it’s like I’m far away from everything.”).

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<sup>1</sup> In an earlier wave of the longitudinal study, the disengagement coping scale had low internal reliability. Consequently, at later waves, the three previously omitted items were included, yielding a 9-item scale.

Consistent with previous research (Connor-Smith et al., 2000; Flynn & Rudolph, 2007), to correct for base-rate differences in the endorsement of responses to stress (Compas et al, 2001; Connor-Smith et al., 2000), proportion scores were computed as the total score for each subscale divided by the total score on the RSQ, with higher scores reflecting higher proportions of each type of response. Previous investigations have established convergent validity and retest reliability for these subscales (Connor-Smith et al., 2000).

*Peer victimization.* Children and teachers completed a modified version of the Social Experiences Questionnaire (Crick & Grotpeter, 1996). The original measure includes 5-item subscales assessing children's experiences of overt victimization and relational victimization. To assess a broader range of victimization experiences, 11 items were added that tap other aspects of overt victimization and relational victimization, yielding a 21-item measure (see Appendix F). For the teacher version, items were slightly reworded to refer to the child's experience of victimization.

Children and teachers indicated how often the child experienced each type of victimization on a 5-point scale (*Never to All the Time*). Scores were computed first as the mean of the items within reporter, with higher scores reflecting more victimization. Child and teacher reports of victimization were positively correlated,  $r(288) = .30, p < .001$ ; thus, the child and teacher scores were averaged to create a victimization composite score. Self and teacher reports of victimization in middle childhood are positively correlated (Bollmer, Harris, & Milich, 2006; Ladd & Kochenderfer-Ladd, 2002), and correspond to reports by peers (Graham & Juvonen, 1998), and parents (Bollmer et al., 2006). Furthermore, self-reports of victimization are associated with behavioral observations as early as kindergarten (Kochenderfer & Ladd, 1997).

## RESULTS

### *Correlational Findings*

Table 4 presents intercorrelations among the variables. Correlations among dimensions of socialization of coping were generally significant and positive; this pattern is consistent with previous investigations of socialization of coping (Abaied & Rudolph, 2010a; 2010b). Punitive responses, however, were significantly associated with fewer primary control engagement suggestions. Negative emotionality was significantly associated with socialization of coping (higher levels of disengagement suggestions, distressed responses, and punitive responses), and adjustment difficulties (higher levels of depressive symptoms, involuntary responses to peer aggression, and peer victimization, and less primary control engagement coping). Depressive symptoms were associated with less adaptive patterns of responses to peer aggression (fewer primary and secondary control engagement responses, higher levels of involuntary responses) and higher levels of peer victimization. Intercorrelations among the dimensions of childrens' responses to peer aggression were consistent with theoretical expectations; primary and secondary control engagement were negatively associated with disengagement coping, involuntary engagement, and involuntary disengagement. In addition, primary and secondary control engagement were negatively associated with peer victimization, whereas disengagement coping, involuntary engagement, and involuntary disengagement were positively associated with peer victimization.

### *Path Models Predicting Depressive Symptoms*

To investigate the prospective, interactive contributions of socialization of coping and negative emotionality to youths' depressive symptoms, path analyses were conducted using Amos 17.0 software (Arbuckle, 2008). Model parameters were estimated using the maximum

likelihood method, and bootstrap analyses were conducted with 1000 samples for each model. Separate models were constructed for each of the five dimensions of socialization of coping: primary control suggestions, secondary control suggestions, disengagement suggestions, distressed responses, and punitive responses. In each model, socialization of coping, negative emotionality, and depressive symptoms were represented by observed variables. The socialization of coping and negative emotionality variables were mean-centered, and the socialization of coping x negative emotionality interaction was represented by the product of these mean-centered variables. To adjust for the temporal stability of depressive symptoms, each model included a path linking  $W_1$  symptoms to  $W_2$  symptoms. Initially, each model included intercorrelations among all  $W_1$  predictors. In some cases, nonsignificant correlations were removed from the model to improve model fit.

To examine the moderating effect of peer victimization, multi-group comparison analyses were conducted to examine whether the fit of each model was significantly different for children exposed to low compared to high victimization<sup>2</sup>. The low and high victimization groups were defined based on a median split on peer victimization scores. To test for moderation, two models were compared: (a) a constrained model in which the paths of interest (i.e., paths between the predictors and  $W_2$  depressive symptoms) were constrained to equality between the low and high victimization groups, and (b) an unconstrained model in which all paths were free to vary between the low and high victimization groups. Chi-square difference tests were used to compare

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<sup>2</sup> Multi-group comparisons also were conducted to investigate whether the paths of interest predicting depressive symptoms were significantly different in boys versus girls. Because these analyses yielded no significant effects, they are not included in this report.

the fit of the constrained and unconstrained models. If the unconstrained model provides a better fit to the data, this suggests that moderation is present (Bollen, 1989). In this case, results were interpreted separately in the low and high victimization groups. If the fit of the unconstrained and constrained models do not significantly differ, this suggests that moderation is not present (Bollen, 1989). In this case, results were interpreted collapsing across the two groups. Several fit indices were examined, including the comparative fit index (CFI; scores above .90 reflect a good fit), the incremental fit index (IFI; scores above .90 reflect a good fit), and the root mean square error of approximation (RMSEA; scores below .08 reflect a good fit). When significant, chi-square difference tests, model fit indices, and simple slope coefficients are presented in the text; when nonsignificant, ranges of these statistics are reported. Path coefficients for the models are presented in the figures.

Significant two-way interactions were interpreted using the linear regression approach outlined by Aiken and West (1991). Specifically, the standardized regression equation was solved for socialization of coping predicting depressive symptoms at low (-1 SD), moderate (mean), and high (+1 SD) levels of negative emotionality, and the direction and significance of the regression coefficients were compared across levels of negative emotionality.

*Primary control engagement suggestions.* The first path analysis examined interactive contributions of primary control engagement suggestions and negative emotionality to children's depressive symptoms. A chi-square difference test,  $\Delta\chi^2(4) = 5.05$ , *ns*, revealed that the unconstrained model,  $\chi^2(6) = 10.30$ , *ns* (CFI = .96, IFI = .97, RMSEA = .05) did not fit significantly better than the constrained model,  $\chi^2(10) = 15.35$ , *ns* (CFI = .95, IFI = .96, RMSEA = .04), suggesting that moderation by peer victimization was not present. Adjusting for the temporal stability of depressive symptoms,  $\beta = .47$ ,  $p < .001$ , primary control engagement

suggestions,  $\beta = -.06$ , *ns*, negative emotionality,  $\beta = .06$ , *ns*, and the primary control x negative emotionality interaction,  $\beta = -.01$ , *ns*, did not significantly predict depressive symptoms over time.

*Secondary control engagement suggestions.* The second path analysis examined the interactive contributions of secondary control engagement suggestions and negative emotionality to children's depressive symptoms. A chi-square difference test,  $\Delta\chi^2(4) = 3.32$ , *ns*, revealed that the unconstrained model,  $\chi^2(6) = 4.98$ , *ns* (CFI = 1.00, IFI = 1.01, RMSEA = .05), did not fit significantly better than the constrained model,  $\chi^2(10) = 8.30$ , *ns* (CFI = .95, IFI = .96, RMSEA = .04), suggesting that moderation by peer victimization was not present. Secondary control engagement suggestions significantly predicted fewer depressive symptoms over time. Negative emotionality and the secondary control engagement x negative emotionality interaction did not significantly predict depressive symptoms (Figure 1). Thus, secondary control engagement suggestions were beneficial for children regardless of their level of negative emotionality or exposure to peer victimization.

*Disengagement suggestions.* The third path analysis examined the interactive contributions of disengagement suggestions and negative emotionality to children's depressive symptoms. A chi-square difference test,  $\Delta\chi^2(4) = 11.80$ ,  $p < .01$ , revealed that the unconstrained model,  $\chi^2(6) = 10.21$ , *ns* (CFI = .97, IFI = .97, RMSEA = .05), fit significantly better than the constrained model,  $\chi^2(10) = 20.01$ ,  $p < .05$  (CFI = .92, IFI = .92, RMSEA = .07). Consequently, path coefficients were interpreted separately in low (below median) and high (above median) peer victimization groups. In the low victimization group, disengagement suggestions, negative emotionality, and the disengagement x negative emotionality interaction were not significantly



associated with depressive symptoms. In the high peer victimization group, the main effects of disengagement suggestions and negative emotionality and the disengagement suggestions x negative emotionality interaction significantly predicted depressive symptoms over time (Figure 2a). To decompose this interaction, linear regression analyses were conducted examining the prospective association between disengagement suggestions and depressive symptoms at low, moderate, and high levels of negative emotionality (Figure 2b). Disengagement suggestions significantly predicted fewer depressive symptoms among children with high,  $\beta = -.33, p < .01$ , and moderate,  $\beta = -.17, p < .05$ , but not low,  $\beta = .00, ns$ , negative emotionality.

*Distressed responses.* The fourth path analysis examined the interactive contributions of distressed responses and negative emotionality to children's depressive symptoms. A chi-square difference test,  $\Delta\chi^2(4) = 4.97, ns$ , revealed that the unconstrained model,  $\chi^2(6) = 13.72, p < .05$  (CFI = .94, IFI = .94, RMSEA = .07), did not fit significantly better than the constrained model,  $\chi^2(10) = 18.68, p < .05$  (CFI = .93, IFI = .93, RMSEA = .06), suggesting that moderation by peer victimization was not present. Adjusting for the temporal stability of depressive symptoms,  $\beta = .45, p < .001$ , distressed responses,  $\beta = -.03, ns$ , negative emotionality,  $\beta = .07, ns$ , and the distressed responses x negative emotionality interaction,  $\beta = .07, ns$ , did not significantly predict depressive symptoms over time.

*Punitive responses.* The fifth path analysis examined the interactive contributions of punitive responses and negative emotionality to children's depressive symptoms. A chi-square difference test,  $\Delta\chi^2(4) = 8.16, ns$ , revealed that the unconstrained model,  $\chi^2(6) = 10.37, ns$  (CFI = .96, IFI = .96, RMSEA = .05), did not fit significantly better than the constrained model,  $\chi^2(10) = 18.52, p < .05$  (CFI = .91, IFI = .92, RMSEA = .06), suggesting that moderation by peer

victimization was not present. Adjusting for the temporal stability of depressive symptoms,  $\beta = .45$ ,  $p < .001$ , punitive responses,  $\beta = -.04$ , *ns*, negative emotionality,  $\beta = .07$ , *ns*, and the punitive responses x negative emotionality interaction,  $\beta = .02$ , *ns*, did not significantly predict depressive symptoms over time.

In sum, two forms of active socialization of coping (secondary control engagement and disengagement) contributed to children's depressive symptoms over time, whereas passive socialization of coping was not related to depressive symptoms. Specifically, secondary control engagement suggestions protected children from developing depressive symptoms regardless of exposure to peer victimization or negative emotionality, and low levels of disengagement suggestions predicted more depressive symptoms among highly victimized children with heightened negative emotionality.

#### *Path Models Predicting Responses to Peer Aggression*

To examine the prospective, interactive contribution of socialization of coping and negative emotionality to children's responses to peer aggression, a series of models was constructed to examine links between each of the five dimensions of socialization of coping and each of the five dimensions of responses to peer aggression (primary control engagement, secondary control engagement, disengagement coping, involuntary engagement, and involuntary disengagement). Socialization of coping, negative emotionality, and the socialization of coping x negative emotionality interactions were represented by observed variables, and each model

included a path linking  $W_1$  responses to  $W_2$  responses. Multi-group comparisons and decomposition of interactions were conducted according to the procedures described above<sup>3</sup>.

*Primary control engagement suggestions.* For each of the five models examining links between primary control engagement suggestions and responses to peer aggression, chi-square difference tests comparing the unconstrained models,  $\chi^2_s \leq 8.45$ , *ns*, CFIs  $\geq .95$ , IFIs  $\geq .96$ , RMSEAs  $\leq .04$ , and constrained models,  $\chi^2_s \leq 14.55$ , *ns*, CFIs  $\geq .93$ , IFIs  $\geq .94$ , RMSEAs  $\leq .04$ , were not significant,  $\Delta\chi^2(4)s \leq 8.16$ , *ns*. Thus, path coefficients were examined collapsing across levels of exposure to peer victimization.

The paths predicting primary control engagement coping, involuntary engagement responses, and involuntary disengagement responses were not significant,  $|\beta|s \leq .08$ , *ns*, adjusting for temporal stability,  $\beta_s = .31 - .39$ ,  $ps < .001$ . The model predicting secondary control engagement coping revealed that, adjusting for temporal stability,  $\beta = .52$ ,  $p < .001$ , negative emotionality marginally predicted less secondary control engagement coping<sup>4</sup>,  $\beta = -.10$ ,  $p < .10$ . Primary control engagement suggestions and the socialization of coping x negative emotionality interaction were not associated with secondary control engagement coping,  $|\beta|s \leq .01$ , *ns*.

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<sup>3</sup> Multi-group comparisons also were conducted to investigate whether the paths of interest predicting responses to peer aggression were significantly different in boys versus girls. Because these analyses yielded few significant effects, they are not included in this report.

<sup>4</sup> The marginal path linking negative emotionality and secondary control engagement coping over time appears in each of the five models predicting secondary control engagement coping. To avoid redundancy, this path is not described further.

The model predicting disengagement coping revealed that the main effects of primary control engagement suggestions and negative emotionality were not significant, and the primary control x negative emotionality interaction marginally predicted less disengagement coping (Figure 3a). Decomposition of the primary control suggestions x negative emotionality interaction (Figure 3b) revealed that primary control engagement suggestions marginally predicted less disengagement coping among children with low negative emotionality,  $\beta = -.13, p < .10$ , but were unrelated to disengagement coping among children with moderate,  $\beta = -.04, ns$ , or high,  $\beta = .06, ns$ , negative emotionality.

*Secondary control engagement suggestions.* For each of the five models examining links between secondary control engagement socialization of coping and responses to peer aggression, chi-square difference tests comparing the unconstrained models,  $\chi^2s \leq 14.31, ps \geq .05$ , CFIs  $\geq .76$ , IFIs  $\geq .80$ , RMSEAs  $\leq .09$ , and constrained models,  $\chi^2s \leq 19.57, ps \geq .05$ , CFIs  $\geq .77$ , IFIs  $\geq .79$ , RMSEAs  $\leq .07$ , were not significant,  $\Delta\chi^2(4)s \leq 5.26, ns$ . Thus, path coefficients were examined collapsing across levels of exposure to peer victimization. The paths predicting responses to peer aggression were not significant in any of the five models,  $|bs| \leq .09, ns$ , adjusting for temporal stability,  $\beta s = .32 - .45, ps < .001$ . Thus, secondary control engagement suggestions did not contribute to children's responses to peer aggression over time.

*Disengagement suggestions.* Chi-square difference tests comparing the unconstrained models,  $\chi^2s \leq 7.77, ns$ , CFIs  $\geq .97$ , IFIs  $\geq .97$ , RMSEAs  $\leq .06$ , and constrained models,  $\chi^2s \leq 12.97, ns$ , CFIs  $\geq .96$ , IFIs  $\geq .96$ , RMSEAs  $\leq .05$ , were not significant for the five models examining links between disengagement socialization of coping and responses to peer aggression,  $\Delta\chi^2(4)s \leq 8.21, ns$ . Thus, path coefficients were examined collapsing across levels of

exposure to peer victimization. Adjusting for temporal stability,  $\beta$ s = .31 - .51,  $ps < .001$ , the path coefficients predicting primary control engagement coping, secondary control engagement coping, disengagement coping, and involuntary disengagement were not significant,  $|\beta|s \leq .07$ , *ns*.

The model predicting involuntary engagement revealed nonsignificant main effects of disengagement socialization of coping and negative emotionality and a significant disengagement socialization of coping x negative emotionality interaction (Figure 4a). Decomposition of this interaction (Figure 4b) revealed that disengagement suggestions significantly predicted fewer involuntary engagement responses over time among children with high negative emotionality,  $\beta = -.20$ ,  $p < .05$ , but were unrelated to involuntary engagement among children with moderate,  $\beta = -.07$ , *ns*, or low negative emotionality,  $\beta = .07$ , *ns*.

*Distressed responses.* Chi-square difference tests comparing the unconstrained models,  $\chi^2s \leq 16.05$ ,  $ps \geq .05$ , CFIs  $\geq .89$ , IFIs  $\geq .91$ , RMSEAs  $\leq .08$ , and constrained models,  $\chi^2s \leq 21.44$ ,  $ps \geq .05$ , CFIs  $\geq .85$ , IFIs  $\geq .87$ , RMSEAs  $\leq .07$ , were not significant for the five models examining links between parents' distressed responses and children's responses to peer aggression,  $\Delta\chi^2(4)s \leq 7.92$ , *ns*. Thus, path coefficients were examined collapsing across levels of exposure to peer victimization. Adjusting for temporal stability,  $\beta$ s = .35 - .45,  $ps < .001$ , the path coefficients predicting secondary control engagement coping, involuntary engagement responses, and involuntary disengagement responses were not significant,  $|\beta|s \leq .08$ , *ns*.

The model predicting primary control engagement coping revealed nonsignificant main effects of distressed responses and negative emotionality and a significant distressed responses x negative emotionality interaction (Figure 5a). Decomposition of this interaction (Figure 5b) revealed that parents' distressed responses significantly predicted less primary control

engagement coping over time among children with high negative emotionality,  $\beta = -.18, p < .05$ , but were unrelated to primary control engagement coping among children with moderate,  $\beta = -.08, ns$ , or low,  $\beta = .03, ns$ , negative emotionality.

The model predicting disengagement coping revealed nonsignificant main effects of distressed responses and negative emotionality and a significant distressed responses x negative emotionality interaction (Figure 6a). Decomposition of this interaction (Figure 6b) revealed that parents' distressed responses marginally predicted more disengagement coping over time among children with high negative emotionality,  $\beta = .14, p < .10$ , but were unrelated to disengagement coping among children with moderate,  $\beta = .03, ns$ , or low,  $\beta = -.09, ns$ , negative emotionality.

*Punitive responses.* Chi-square difference tests comparing the unconstrained models,  $\chi^2_s \leq 17.48, ps \geq .01$ , CFIs  $\geq .89$ , IFIs  $\geq .91$ , RMSEAs  $\leq .08$ , and constrained models,  $\chi^2_s \leq 23.51, ps \geq .01$ , CFIs  $\geq .85$ , IFIs  $\geq .87$ , RMSEAs  $\leq .07$ , were not significant for the models examining links between parents' punitive responses and children's secondary control engagement coping, disengagement coping, involuntary engagement responses, and involuntary disengagement responses,  $\Delta\chi^2(4)s \leq 6.30, ns$ . Thus, the path coefficients of these four models were examined collapsing across levels of exposure to peer victimization. Adjusting for temporal stability,  $\beta_s = .35 - .45, ps < .001$ , the path coefficients predicting secondary control engagement coping, disengagement coping, involuntary engagement responses, and involuntary disengagement responses were not significant,  $|\beta_s| \leq .08, ns$ .

For the model predicting primary control engagement coping, a chi-square difference test,  $\Delta\chi^2(4) = 9.84, p < .05$ , revealed that the unconstrained model,  $\chi^2(8), p < .05$  (CFI = .85, IFI = .87, RMSEA = .07), fit significantly better than the constrained model,  $\chi^2(12) = 27.44, p < .05$

(CFI = .76, IFI = .78, RMSEA = .07). Consequently, path coefficients were interpreted separately in low (below median) and high (above median) peer victimization groups. In the low victimization group, path coefficients predicting primary control engagement coping were not significant. Results in the high victimization group revealed nonsignificant main effects of punitive responses and negative emotionality and a marginal punitive responses x negative emotionality interaction (Figure 7a). Decomposition of this interaction (Figure 7b) revealed that punitive responses marginally predicted less primary control engagement coping among highly victimized children with high negative emotionality,  $\beta = -.21$ ,  $p < .10$ , but were unrelated to primary control engagement coping among highly victimized children with moderate,  $\beta = -.08$ , *ns*, or low,  $\beta = .06$ , *ns*, negative emotionality.

The findings predicting depressive symptoms and responses to peer aggression are summarized in Table 4. In sum, both active and passive forms of socialization of coping contributed to children's responses to peer aggression over time. Primary control engagement suggestions predicted less disengagement coping for children with low negative emotionality, whereas disengagement suggestions predicted fewer involuntary engagement responses for children with high negative emotionality. Mothers' distressed responses predicted less primary control engagement coping and more disengagement coping among children with high negative emotionality, and mothers' punitive responses predicted less primary control engagement coping among highly victimized children with high negative emotionality.

## DISCUSSION

This study examined the prospective, interactive contributions of socialization of coping and negative emotionality to children's responses to peer aggression and depressive symptoms. Active socialization of coping contributed to depressive symptoms both independently (secondary control suggestions) and in interaction with negative emotionality (disengagement suggestions). Active socialization of coping also contributed to responses to peer aggression; the specific nature of these contributions varied as a function of negative emotionality. Passive socialization of coping (distressed and punitive responses) contributed to less primary control engagement coping and more disengagement coping with peer aggression, but only for children with high negative emotionality. Results revealed that socialization of coping contributed to children's depressive symptoms independent of their responses to peer aggression. With two exceptions, children's exposure to peer victimization did not moderate the associations between socialization of coping, negative emotionality, and children's adjustment.

### *Active Socialization of Coping*

As anticipated, primary control engagement suggestions predicted less disengagement coping among children with low but not high negative emotionality. The goal of primary control engagement coping is to directly address stressful conditions or negative emotions by attempting to solve the problem, regulate emotions, or purposefully express emotions. In this study, children responded to parental encouragement to use primary control engagement not by using such strategies more often, but by using disengagement strategies (i.e., behavioral avoidance) less often. In this way, parents' primary control engagement suggestions protected children with low emotionality from adopting an avoidant pattern of responding to peer aggression. Parental encouragement to deal with stress and emotions directly is likely to support children's beliefs



that they are capable of handling peer victimization stress if they try. In addition, such suggestions communicate that children have some degree of control when other children are mean to them. By fostering children's coping efficacy and agency in the face of peer aggression, parents help children with low negative emotionality rely less on disengagement coping over time. Primary control engagement suggestions did not contribute to responses to peer aggression among children with high negative emotionality. This finding is consistent with the idea that highly reactive children, who are likely to find primary control engagement difficult and overwhelming, will be less receptive to such suggestions compared to children with low negative emotionality. These findings also are consistent with a goodness of fit model (Kochanska et al., 2007; Thomas & Chess, 1977), such that primary control engagement suggestions appear to be a particularly good fit to the coping needs of children with low negative emotionality.

Primary control engagement suggestions did not, however, protect children from depressive symptoms over time. It is possible that the one-year time frame of this study was not long enough for the benefits of primary control engagement suggestions to fully unfold, and links to depressive symptoms might emerge at later follow-ups. Alternatively, socialization of primary control engagement could be more relevant to other adjustment outcomes, such as aggression, in the context of peer victimization. For example, encouragement to problem-solve when peers are mean could provide children with positive alternatives to aggressive retaliation; similarly, encouragement to regulate and express emotions could help children control negative emotions, such as frustration and anger, that commonly underlie reactive aggression.

As expected, parental encouragement to use secondary control engagement coping predicted fewer depressive symptoms over time regardless of children's negative emotionality. The goal of secondary control engagement strategies is to adapt oneself to stressful conditions by

trying to think positively, revising one's appraisal of the situation, or distracting oneself with enjoyable activities. Weisz and colleagues proposed that adapting oneself to current conditions via secondary control is most appropriate in situations that are difficult to control (Band & Weisz, 1988; Weisz, McCabe, & Dennig, 1994). Given that peer victimization typically takes place in obligatory settings such as school and daycare, children may not be able to control their exposure to aggressors; moreover, some characteristics that provoke aggression from peers, such as physical features, ethnicity, or temperamental traits (Hanish & Guerra, 2000; Hodges, Malone, & Perry, 1997; Schwartz, Proctor, & Chien, 2001), also may be difficult for children to control. Consequently, parental encouragement to use secondary control engagement coping appears to provide children with effective resources for dealing with peer victimization. Furthermore, because secondary control strategies represent less resource-intensive alternatives to primary control strategies, even children prone to intense negative reactivity benefited from parental encouragement to use secondary control engagement coping.

Secondary control engagement suggestions did not, however, contribute to children's responses to peer aggression over time, suggesting that alternative mechanisms account for the link between secondary control suggestions and subsequent depressive symptoms. Secondary control suggestions, which include parental encouragement to think that everything will be all right, laugh about things to make oneself feel better, or distract oneself with something fun, are likely to be very comforting to children, helping to maintain positive mood and self-worth. Furthermore, such suggestions perhaps communicate that peer victimization stress is "not the end of the world," helping children to avoid feeling hopeless or overwhelmed when they are victimized.

Disengagement suggestions interacted with negative emotionality and exposure to peer victimization to predict children's depressive symptoms over time. Specifically, parental encouragement to disengage from peer victimization stress had a protective effect, predicting fewer symptoms, for children with high or moderate negative emotionality who were also exposed to high levels of peer victimization. Children with high negative emotionality suffered the highest emotional cost, displaying the most depressive symptoms, when parents infrequently encouraged disengagement coping, whereas children with low negative emotionality showed relatively low levels of depressive symptoms regardless of parents' disengagement suggestions. When disengagement suggestions were high, children displayed similar levels of depressive symptoms at all levels of negative emotionality. Thus, it appears that parental encouragement to avoid peer aggression allows highly victimized children with high negative emotionality to overcome their temperament-based vulnerability to depressive symptoms.

Notably, disengagement suggestions had a protective effect only for children who experienced the dual risks of heightened negative emotionality and exposure to peer victimization. In other words, children benefited from parental encouragement to avoid stress if they were both prone to negative reactivity and frequently exposed to negative experiences that would likely elicit such reactions. Consistent with a goodness of fit model (Kochanska et al., 2007; Thomas & Chess, 1977), children who experience both risks appear to have unique coping needs, such that disengagement suggestions, which have been previously linked to heightened depression (Abaied & Rudolph, 2010a), in fact buffered these children from developing symptoms. This finding suggests that disengaging from peer aggression, although problematic as a primary coping strategy, may be beneficial under particular circumstances. For example, disengagement is thought to be a relatively adaptive strategy for coping with frequent exposure

to uncontrollable stressors, such as economic disadvantage, neighborhood violence, parental conflict, or abuse (Compas et al., 2001; Losoya, Eisenberg, & Fabes, 1998; Tolan, Guerra, & Montaini-Klovhahl, 1997), and a small number of studies support this idea (Chaffin, Wherry, & Dykman, 1996; Dempsey, Overstreet, & Moely, 2000; Gonzales, Tein, Sandler, & Friedman, 2001; O'Brien, Bahadur, Gee, & Balto, 1997; O'Brien, Margolin, & John, 1995). As discussed earlier, it is possible that children will have relatively little control over their exposure to peer victimization. Research examining the moderating role of children's perceived control over their exposure to peer victimization would shed further light upon this issue. For example, it is possible that parental encouragement to avoid peer aggression (e.g., staying away from bullies) supports the coping efficacy of children who believe that they are unable to change whether or not other children are aggressive, whereas children who believe they can change their exposure to peer aggression might interpret parents' encouragement to disengage as an indication that the child's coping skills are inadequate.

Similar to results predicting depressive symptoms, disengagement suggestions contributed to fewer involuntary engagement responses over time among children with high negative emotionality, although peer victimization did not moderate this link. Parental encouragement to avoid interacting with aggressive peers perhaps prevents highly reactive children from becoming overwhelmed, making it less likely that these children will experience uncontrolled intrusive thoughts, rumination, or emotional arousal. Interestingly, children did not respond to disengagement suggestions with disengagement coping. Children's heightened reactivity could make it very difficult for them to disengage from stressful thoughts and stimuli independently of parents, such that they do not report using these strategies on their own. Rather, for these children, parental encouragement to disengage may play a comforting role similar to

secondary control engagement suggestions, helping them maintain a sense of control over their cognitive and emotional reactions when they experience an upsetting interaction with an aggressive peer.

It should also be noted that although parental encouragement to disengage from peer aggression appears to protect children with high negative emotionality from maladaptive responses to peer aggression and depressive symptoms, it is unlikely that these positive outcomes will endure if children do not also employ adaptive coping responses. A limitation of the current design is that it does not tap into the moment-to-moment process of children's responses to peer aggression. Although disengagement suggestions did not predict variability in children's effortful coping, children who receive encouragement to disengage may employ multiple strategies for coping with one particular stressful event in ways that could not be captured in this study. For example, a *disengage first, engage second* approach may be most appropriate for highly reactive children who need a buffer or "cooling down" period to overcome their involuntary responses and gather their resources for purposeful coping. Moment-to-moment research designs (e.g., observational or daily diary approaches) are needed to empirically capture the nuances of the coping process.

#### *Passive Socialization of Coping*

As predicted, parents' distressed responses contributed to lower levels of primary control engagement coping and higher levels of disengagement coping over time. It was anticipated that the distressed responses x negative emotionality interactions predicting responses to peer aggression would be consistent with a diathesis stress model. This hypothesis was partially supported in that the association between distressed responses and children's coping was significant only for children with heightened temperamental vulnerability. However, the

crossover pattern of these interactions is not consistent with traditional diathesis stress models (Monroe & Simons, 1991), in which the diathesis contributes to differences in adjustment only when children experience heightened exposure to an environmental stressor (in this case, parents' distressed responses). Rather, in this study, differences in primary control engagement and disengagement coping between children with low, moderate, and high negative emotionality emerged at both low and high levels of distressed responses. Compared to children with low or moderate negative emotionality, children with high negative emotionality reported the most adaptive coping (high primary control engagement, low disengagement) when parents' distressed responses were low, as well as the least adaptive coping (low primary control engagement, high disengagement) when distressed responses were high. This pattern may be interpreted in terms of a differential-susceptibility model (for a review, see Belsky & Pluess, 2009), which proposes that certain characteristics (e.g., high negative emotionality) contribute to heightened susceptibility to both negative and positive environmental influences. In this case, highly reactive children were the most sensitive to the negative effects of parents' frequent distressed responses and the positive effects of parents' infrequent distressed responses.

It should be noted, however, that a differential-susceptibility effect emerged for only one of five dimensions of socialization of coping. Belsky and Pluess (2009) propose that children with heightened susceptibility should benefit most not only from the absence of negative parenting, as observed in this study, but also from the presence of positive parenting. Indeed, other studies have observed this pattern, such as differential susceptibility to both sensitive and harsh/controlling parenting (Bradley & Corwyn, 2008; van Aken, Junger, Verhoeven, van Aken, & Dekovic, 2007). Although evidence of differential susceptibility to socialization has been observed using parents' reports of their child's temperament, the processes underlying

susceptibility to environmental influence are likely to operate in part at a physiological level (e.g., via the autonomic nervous system or the neuroendocrine system; Belsky & Pluess, 2009). Thus, future work examining interactions between biological indicators of negative emotionality and socialization of coping is needed to replicate and extend these findings.

As expected, punitive responses predicted less primary control engagement coping among children with high but not moderate or low negative emotionality. Consistent with a diathesis stress model (Monroe & Simons, 1991), the harmful effect of parents' punitive responses emerged only for children with the highest temperamental vulnerability. However, when parents' punitive responses were high, children showed similarly low levels of primary control engagement at all levels of negative emotionality. These findings are consistent with the idea that frequent punitive responses to children's distress undermine rather than support children's adaptive coping (Eisenberg et al., 1996; Fabes et al., 2002). Punitive responses involve responding to the child's distress with scolding, threats, or invalidation of the child's emotions. By responding punitively, parents communicate that the child's distress is aversive and inappropriate rather than provide their child with resources for coping. Among children with high negative emotionality, punitive responses might be particularly detrimental to feelings of agency and efficacy in the face of stress, such that children's willingness to directly address peer aggression and negative emotions is compromised. Unexpectedly, in the context of infrequent punitive responses from parents, children with high negative emotionality showed somewhat higher levels of primary control engagement coping compared to children with moderate or low negative emotionality. Given that children with high negative emotionality experience frequent negative emotions, perhaps they have more opportunities to employ primary control engagement

coping strategies such as emotion regulation and expression, and thus benefit when parents restrain themselves from showing punitive responses.

Parents' passive socialization of coping did not predict children's depressive symptoms over time. As children who receive distressed responses will potentially continue to exhibit maladaptive patterns of coping with peer aggression, the negative effects of these responses may accumulate to predict depression over a longer time frame. It will be particularly important to explore whether distressed and punitive responses contribute to heightened risk for depression during the transition to adolescence, when rates of depression among children begin to rise. Alternatively, passive socialization of coping may be more relevant to the development of other adjustment difficulties besides depression. For example, Eisenberg et al. (1999) found that distressed and punitive responses prospectively contributed to children's externalizing emotions (anger, hostility, irritability) but not internalizing emotions (anxiety, sadness). Other forms of punitive parenting, such as harsh or coercive discipline, are robust predictors of externalizing problems such as conduct problems and aggression (e.g., Chang, Schwartz, Dodge, & McBride-Chang, 2003; Snyder, Cramer, Afank, & Patterson, 2005). Thus it will be important to explore the implications of passive socialization of coping for children's externalizing symptoms in future work.

It should be noted that the majority of significant findings were not moderated by children's exposure to peer victimization. There are a number of potential explanations for this pattern. First, socialization of coping with peer victimization is relevant to children's responses to minor peer harassment as well as more severe victimization. Because most children will have some opportunity to enact parents' coping suggestions or elicit parents' passive responses, children's level of exposure to victimization does not necessarily play a critical role in children's



responses to socialization of coping. Second, parents' socialization of coping in the context of peer victimization might affect how children respond to stress in other contexts, such that children's exposure to other types of stress (e.g., broader peer relationships, academic, family) are more relevant as moderators. Finally, variation in children's subjective stress might attenuate the differences between children exposed to low and high peer victimization. It is possible that some children perceive only mild or infrequent peer victimization as highly stressful; as a result, children exposed to mild and high levels of peer victimization might exhibit similar responses to socialization of coping.

### *Implications for Theory and Research*

This investigation of parent socialization of coping with peer victimization contributes to a growing body of research revealing that socialization of coping has the potential to support or undermine children's responses to stress and mental health. This research provides empirical support for existing theories of coping development, which posit that interactions with social partners, and parents in particular, represent a critical developmental context for children's acquisition of coping skills (Power, 2004; Skinner & Edge, 2002; Skinner & Zimmer-Gembeck, 2007) and that parents may influence children's coping development through both explicit instruction and passive modeling of emotional reactions (Fabes et al., 2002; Power, 2004; Skinner & Zimmer-Gembeck, 2007). Moreover, this research expands upon existing theories of coping development by highlighting the need to consider ways that socialization of coping interacts with characteristics of the child and context to contribute to children's adjustment.

Building upon previous research (Abaied & Rudolph, 2010a), this study provides additional evidence that parents' reactions to children's stressful experiences have noteworthy implications for children's resilience to depression. Although direct links between broader,

context-independent parenting behaviors (e.g., warmth, support, hostility, criticism) are well-established (Alloy et al., 2006; Sheeber et al., 2001), this research suggests that specific parenting behaviors (i.e., coping suggestions and responses) within specific contexts (i.e., children's peer victimization experiences) also play an important role. Indeed, socialization of coping represents the intersection between a number of factors related to children's risk for depression, including parenting behaviors (Alloy et al., 2006; Sheeber et al., 2001), stressful life events (Ge, Lorenz, Conger, Elder, & Simons, 1994; Shih, Eberhardt, Hammen, & Brennan, 2006), and coping and emotion regulation (Compas et al., 2001; Durbin & Shafir, 2007). The findings of this study suggest that investigating parenting behaviors within specific contexts with particular relevance to children's emotional well-being is an important next step for theory and research seeking to understand parents' contribution to children's depression.

Consistent with contemporary perspectives on parenting (e.g., Collins et al., 2000), this research also highlights that characteristics of the child and context can play a role in determining the impact of parenting behaviors on children's risk for, or resilience to, depressive symptoms. Although much of the work examining parent contributions to children's depression has focused upon main effects models, some investigations have examined moderation by contextual factors such as stress exposure (Abaied & Rudolph, 2010a) and mothers' depressive symptoms (Brennan, Le Brocque, & Hammen, 2003), and child characteristics such as gender (e.g., Duggal, Carlson, Sroufe, & Egeland, 2001; Jacobvitz, Hazen, Curran, & Hitches, 2004) and temperament (e.g., Colder et al., 1997; Lengua, Wolchik, Sandler, & West, 2000; Morris et al., 2002). Consistent with the theoretical perspective of developmental psychopathology (Sroufe & Rutter, 1984; Rutter & Sroufe, 2000), continuing to examine such moderators will help to

elucidate the various pathways through which parents contribute to children's mental health over the course of development.

This research provides additional support for a growing consensus that children's temperamental characteristics shape their reactions to parent behavior (for reviews, see Collins et al., 2000; Sanson & Rothbart, 1995). Indeed, in this study, children's temperament-based negative emotionality moderated the majority of associations between socialization of coping and children's adjustment, particularly children's responses to peer aggression. In this study, negative emotionality was selected as a dimension of temperament with particular relevance to socialization of coping and children's responses to peer aggression, given its connection to children's stable patterns of reactivity to stimulation. However, other dimensions of temperament also may play a role. For example, children's degree of fearfulness might impact children's propensity to benefit from certain types of coping suggestions more than others. Highly fearful children might have marked difficulty directly engaging with potentially frightening experiences of peer aggression, whereas fearless children might be better equipped with resources to engage with peer aggression. Similarly, children with higher effortful control might have adequate resources available for effective, planful engagement with stress and thus benefit from parental encouragement to engage, whereas children with low effortful control, who have difficulty self-regulating their behavior, might benefit more from encouragement to disengage. It is also possible that the interplay among these different aspects of temperament could moderate the effects of socialization of coping. Examining the effects of different dimensions of socialization of coping for children with certain clusters of temperamental characteristics (e.g., Thomas & Chess, 1977) might be a fruitful approach for future work in this area.

Finally, this investigation presents novel evidence that parents' responses to children's victimization experiences are prospectively linked to children's adjustment. Empirical investigations of parents' role in children's victimization experiences have focused almost exclusively on parents as contributors to children's vulnerability to victimization rather than parents' reactions when children are victimized. Moreover, no previous investigations have directly examined links between parents' responses to victimization and children's adjustment outcomes. Thus, this study represents a first step in addressing a notable lacuna in the peer victimization literature. Given the high frequency of victimization and harassment among peers in middle childhood (Glover et al., 2000; Hanish & Guerra, 2002; Rigby, 2000; Smith & Shu, 2000), it is likely that most children will be exposed to parents' reactions to victimization at some point in their development. This study identifies parent responses to children's victimization experiences as a critical line of inquiry for future work, and highlights the need to consider parents' responses in order to understand the processes through which victimization contributes to children's adjustment.

#### *Implications for Intervention and Prevention*

Parent responses to children's victimization experiences are a potential target for intervention. Recent reviews of school practices and intervention programs suggest that zero-tolerance policies toward bullying, which discourage children from reporting bullying events and fail to provide prosocial alternatives to aggression, are ineffective at preventing aggression among peers in schools (for reviews, see Bauman, Rigby, & Hoppa, 2008; Skiba, Reynolds, Graham, Shera, Conoley, & Garcia-Vazquez, 2006). Because incidents of peer aggression cannot be entirely avoided, coaching children on how to appropriately respond to bullying is a critical task for intervention efforts. Fortunately, this study suggests that children's coping and

involuntary responses to peer aggression are malleable in response to both active and passive socialization from adults. Targeting children's effective responses to peer aggression could play a critical role in preventing the negative consequences of peer victimization, as well as supporting children's broader social and emotional well-being.

Socialization of coping with peer aggression could be applied to existing intervention programs in a number of ways. For example, school faculty and staff could incorporate socialization of coping with peer aggression into in-school instruction sessions. Specifically, instructors might provide children with examples of appropriate ways to deal with negative feelings that result from being bullied, as well as prosocial methods of discussing bullying incidents with aggressive peers. Parent socialization of coping with peer aggression could also be targeted directly. Through literature or training sessions, intervention programs might bolster parents' knowledge of appropriate strategies for coping with peer aggression, as well as the possible consequences of parents' passive responses when children describe victimization experiences. Parents of children with high negative emotionality or children who are frequently victimized also might benefit from additional instruction on specific types of responses that will be particularly helpful versus harmful for their child. On a broader level, it will be important for interventionists to communicate to parents, teachers, and school staff that each time a child reports that they have been victimized by a peer, this represents an opportunity for adults to support the child's well-being.

#### *Limitations and Future Directions*

A few limitations of this research should be noted. First, the socialization of coping questionnaires used in this study did not capture the valence of parents' responses. It is possible that parents' delivery of coping suggestions and passive responses are shaped by other aspects of

their parenting practices. For example, coping suggestions could be communicated in a warm, autonomy-supportive manner (e.g., praising the child's ability to manage stress, encouraging the child to think of ways to calm themselves down) or a hostile, controlling manner (e.g., criticizing the child's response, ordering the child to respond in a certain way). Children are more likely to internalize socialization messages that are communicated in a warm or autonomy-supportive manner rather than a hostile or psychologically controlling manner (Grolnick & Ryan, 1987; Grolnick, Gurland, DeCoursey, & Jacob, 2002; Grusec & Goodow, 1994; Kochanska & Aksan, 1995). Similarly, children may be more likely to follow warm, autonomy-supportive coping suggestions from parents rather than hostile, controlling coping suggestions. Consistent with self-determination theory (Ryan & Deci, 2000), socialization of coping that supports children's autonomy might also better equip children to effectively implement coping suggestions by fostering children's intrinsic motivation to improve their coping skills. These possibilities may be addressed in future studies of socialization of coping by assessing self and child reports of broader parenting constructs such as autonomy-support, psychological control, hostility, and warmth. Parents' reports of coping suggestions in their own words via interviews or observations might also be coded for autonomy-support, control, hostility, and warmth.

Although individual differences in socialization of coping have been identified in numerous samples (e.g., Abaied & Rudolph, 2010a; Kliever et al., 1996; 2006), it remains unclear exactly what elicits parents' socialization of coping with peer aggression. Children likely vary in the extent to which they seek out coping guidance from parents. Children vary in their willingness to disclose peer victimization experiences (Misha, Pepler, & Wiener, 2006) or experiences in general (Darling, Cumsille, Caldwell, & Dowdy, 2006; Kerr & Stattin, 2000) to parents, and some children are more likely than others to seek support from other people when

they are victimized by peers (Hunter, Boyle, & Warden, 2004). In addition, parents might offer coping guidance in response to a number of triggers. Some parents might make coping suggestions only when children explicitly ask for help, whereas others might spontaneously offer coping guidance because the child is visibly upset, or after learning of a stressful incident from another source (e.g., school staff, siblings). Obtaining children's reports of how often they seek coping guidance from their parents, as well as parents' reports of the immediate context of their coping suggestions, would shed light upon this issue. A daily-diary study in which families are trained to keep track of children's support-seeking and parents' suggestions would be particularly well-suited to tapping the elicitation of socialization of coping.

It should be noted that the overall percentage of significant effects is relatively low. Given that the significant findings were largely consistent with hypotheses as well as broader theories of coping, depression, and parenting x temperament interactions, it is unlikely that the findings are significant purely by chance. However, these findings should perhaps be interpreted with some caution until replicated in future investigations.

Finally, future work should explore the relative significance of socialization of coping compared to other factors known to contribute to children's responses to peer aggression. Recent findings have revealed that children's social goal orientations, fearful temperament, and frequency of exposure to peer victimization prospectively contribute to responses to peer aggression (Rudolph, Abaied, Flynn, Sugimura, & Agoston, in press; Hunter et al., 2004; Terranova, 2009). In addition, children's emotional reactivity to peer aggression, teachers' beliefs about bullying, and teachers' classroom management strategies are concurrently associated with children's responses to peer aggression (Kochenderfer, 2004; Kochenderfer-Ladd & Pelletier, 2008). Examining the interplay between these factors and socialization of

coping will facilitate successful interventions targeting children's coping with peer aggression. Of particular interest is whether parents' adaptive socialization of coping can effectively interrupt the negative effects of other vulnerabilities for problematic responses to peer aggression.

### *Conclusion*

This research presents longitudinal evidence that parents' active and passive socialization of coping in the context of peer victimization interacts with children's negative emotionality to contribute to children's responses to peer aggression and depressive symptoms. These findings expand our understanding of the complex processes through which parents contribute to children's coping development and emotional distress. Finally, this research highlights the need to include parents in interventions targeting children's responses to stress as well as peer victimization in schools.



# TABLES

Table 1

## *Descriptive Statistics*

Variable	W1			W2			Temporal Stability
	<i>M</i>	<i>SD</i>	<i>α</i>	<i>M</i>	<i>SD</i>	<i>α</i>	
Socialization of Coping - General							
Primary Control Engagement	4.19	.58	.79	4.21	.54	.76	.63***
Secondary Control Engagement	3.31	.76	.75	3.36	.74	.76	.55***
Cognitive Distraction	2.91	.81	.86	2.89	.81	.87	.54***
Behavioral Disengagement	3.36	.83	.81	3.41	.81	.81	.58***
Socialization of Coping - Situational							
Primary Control Engagement	6.06	.79	.68	6.06	.72	.66	.50***
Secondary Control Engagement	4.57	1.22	.77	4.77	1.20	.81	.56***
Expressive Encouragement	5.89	1.12	.88	5.88	1.09	.91	.59***
Behavioral Disengagement	5.69	1.02	.77	5.72	1.07	.82	.55***
Distressed Responses	4.80	1.63	.92	4.81	1.59	.92	.65***
Punitive Responses	2.03	1.02	.78	2.06	.97	.76	.56***
Negative Emotionality	2.57	.57	.91	2.52	.59	.92	.82***
Depressive Symptoms	1.63	.58	.86	1.59	.62	.91	.48***
Children's Responses to Stress							
Primary Control Engagement	.17	.03	.71	.17	.03	.76	.36***
Coping							
Secondary Control Engagement	.22	.04	.78	.22	.04	.80	.51***
Coping							
Disengagement Coping	.22	.04	.77	.22	.04	.78	.32***
Involuntary Engagement	.22	.04	.83	.22	.04	.83	.41***
Involuntary Disengagement	.17	.03	.73	.16	.03	.80	.41***
Peer Victimization							
Self Report	2.09	.76	.93	1.91	.71	.91	.57***
Teacher Report	1.82	.63	.97	1.75	.67	.97	.40***

\*\*\*  $p < .001$ .

Table 2

*Intercorrelations Among the General (G) and Situational (S) Active Socialization of Coping Variables*

	1	2	3	4	5	6	7	8
Primary Control - G	--	.33***	.15**	.19**	.50***	.11 <sup>^</sup>	.48***	.14*
Secondary Control - G		--	.39***	.17**	.40***	.51***	.30***	.14*
Cognitive Distraction - G			--	.60***	.21***	.43***	.05	.30***
Behavioral Disengagement - G				--	.22***	.25***	.09	.59***
Primary Control - S					--	.37***	.63***	.33***
Secondary Control - S						--	.24***	.32***
Expressive Encouragement - S							--	.23***
Behavioral Disengagement - S								--

<sup>^</sup>  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 3

*Principal Components Factor Analysis of the Socialization of Coping Measures*

Scale	Primary Control Engagement	Disengagement	Secondary Control Engagement
Expressive Encouragement – S	<b>.86</b>	-.02	.00
Primary Control – S	<b>.77</b>	.10	-.18
Primary Control - G	<b>.77</b>	.05	.02
Behavioral Disengagement – G	-.02	<b>.90</b>	-.04
Behavioral Disengagement – S	.20	<b>.82</b>	.10
Secondary Control – S	.21	-.18	<b>-.83</b>
Secondary Control – G	.02	.07	<b>-.80</b>
Cognitive Distraction – G	-.20	.50	<b>-.57</b>

Table 4

*Intercorrelations of the Measures at Wave 1*

	1	2	3	4	5	6	7	8	9	10
1. Primary Control Engagement Suggestions	--	.39***	.28***	.25***	-.23***	-.02	.12^	.07	-.08	.03
2. Secondary Control Engagement Suggestions		--	.44***	.16**	.01	.08	.05	-.08	-.03	.03
3. Disengagement Suggestions			--	.28***	.02	.14*	.06	-.01	.01	-.00
4. Distressed Responses				--	.01	.19**	-.03	.03	-.08	.09
5. Punitive Responses					--	.16**	.00	-.01	.09	-.06
6. Negative Emotionality						--	.14*	-.20**	-.06	.01
7. Depressive Symptoms							--	-.29***	-.29***	-.04
8. Primary Control Engagement Coping								--	.14*	-.11^
9. Secondary Control Engagement Coping									--	-.08
10. Disengagement Coping										--

^ $p < .10$ . \* $p < .05$ . \*\* $p < .01$  \*\*\* $p < .001$ .

Table 4 continued

	11	12	13
11. Primary Control Engagement Suggestions	.03	-.02	-.06
12. Secondary Control Engagement Suggestions	.03	.03	-.07
13. Disengagement Suggestions	-.04	.04	-.03
14. Distressed Responses	.01	-.00	-.04
15. Punitive Responses	-.08	.03	.01
16. Negative Emotionality	.09	.14*	.25***
17. Depressive Symptoms	.40***	.18**	.42***
18. Primary Control Engagement Coping	-.41***	-.52***	-.32***
19. Secondary Control Engagement Coping	-.63***	-.55***	-.26***
20. Disengagement Coping	-.30***	-.15**	-.03
21. Involuntary Engagement Responses	--	.19**	.32***
22. Involuntary Disengagement Responses		--	.25***
23. Peer Victimization			--

<sup>a</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$  \*\*\* $p < .001$ .

Table 5

*Summary of Findings*

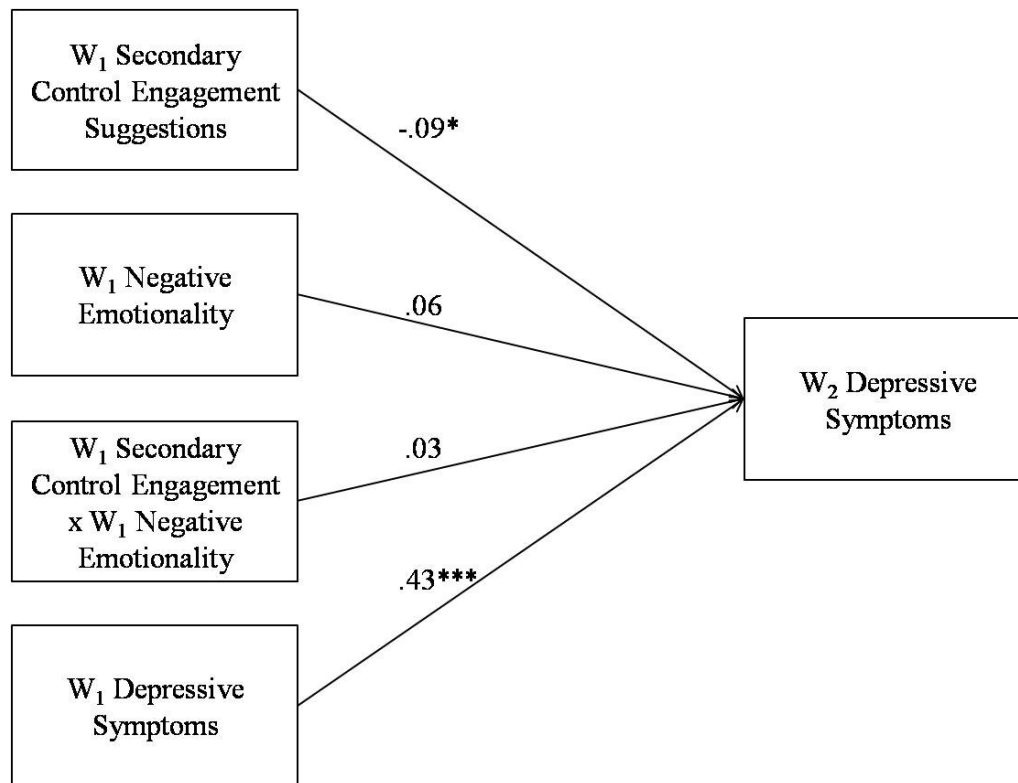
	Depression	Primary Control Engagement	Secondary Control Engagement	Disengagement	Involuntary Engagement	Involuntary Disengagement
Primary Control Suggestions	<i>ns</i>	<i>ns</i>	<i>ns</i>	Primary control engagement suggestions predicted less disengagement coping among children with low negative emotionality.	<i>ns</i>	<i>ns</i>
Secondary Control Suggestions	Secondary control suggestions predicted fewer depressive symptoms across the entire sample.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Disengagement Suggestions	Disengagement suggestions predicted fewer depressive symptoms among children with high negative emotionality who were exposed to high levels of victimization.	<i>ns</i>	<i>ns</i>	<i>ns</i>	Disengagement suggestions predicted fewer involuntary engagement responses among children with high negative emotionality.	<i>ns</i>

Table 5 continued

Distressed Responses	<i>ns</i>	Distressed responses predicted less primary control engagement coping among children with high negative emotionality.	<i>ns</i>	Distressed responses predicted more disengagement coping among children with high negative emotionality.	<i>ns</i>	<i>ns</i>
Punitive Responses	<i>ns</i>	Punitive responses predicted less primary control engagement coping among children with high negative emotionality who were exposed to high levels of victimization.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>

*Note.* *ns* indicates a non-significant effect.

## FIGURES



*Figure 1.* Path model predicting depressive symptoms from secondary control suggestions, negative emotionality, and the secondary control suggestions x negative emotionality interaction.



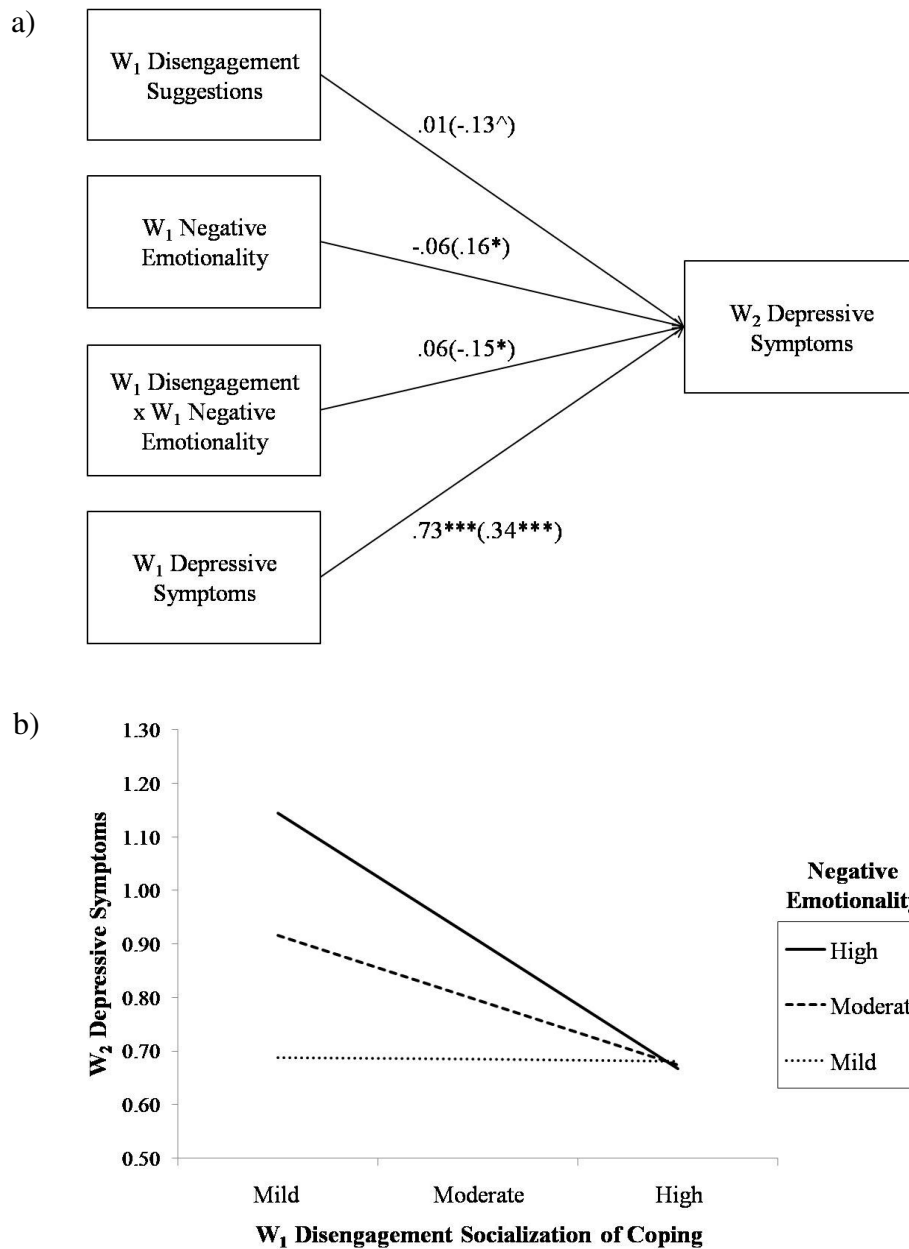


Figure 2. (a) Path model predicting depressive symptoms from disengagement suggestions, negative emotionality, and the disengagement suggestions x negative emotionality interaction: Path coefficients for the low victimization group appear outside parentheses, and coefficients for the high victimization group appear inside parentheses; (b) Disengagement suggestions predicting depressive symptoms at low, moderate, and high levels of negative emotionality among youth exposed to high levels of peer victimization.

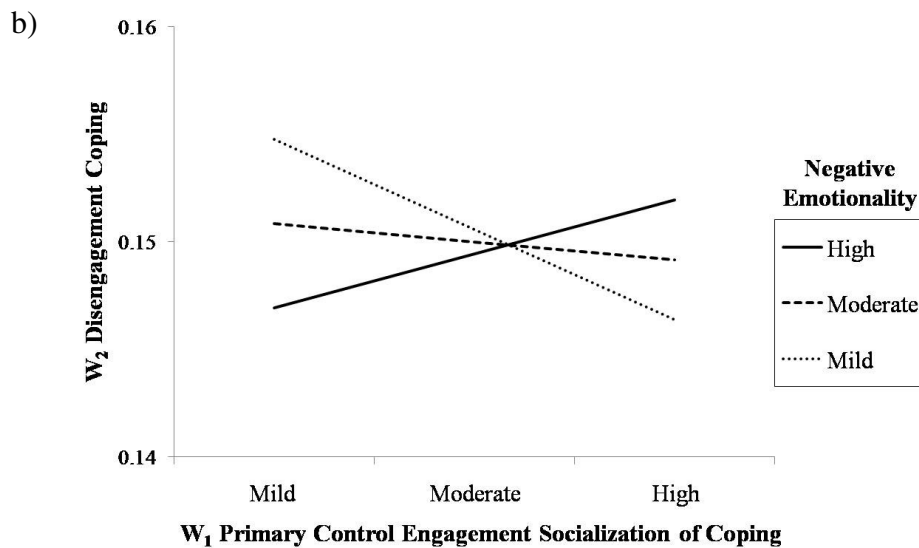
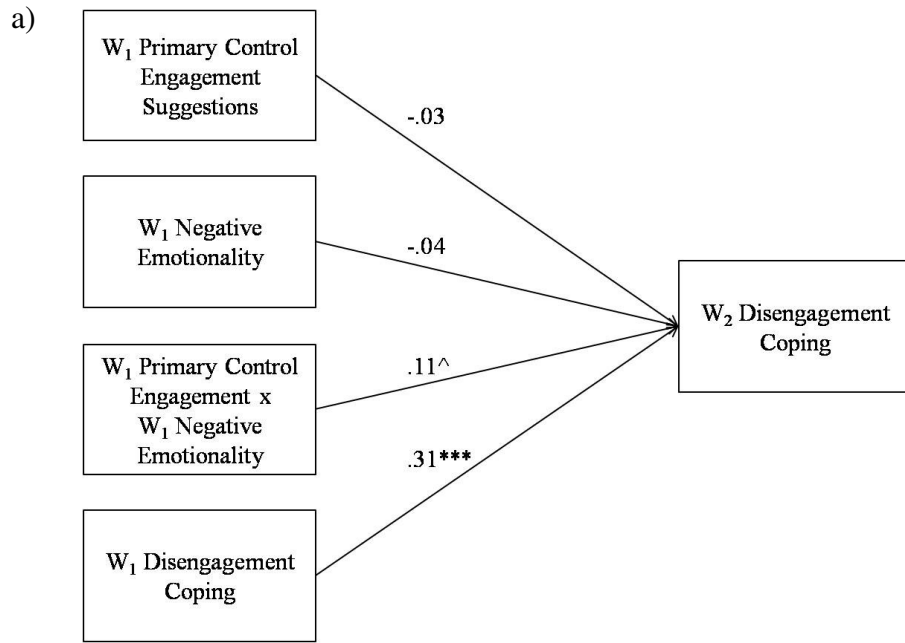


Figure 3. (a) Path model predicting disengagement coping from primary control engagement suggestions, negative emotionality, and the primary control engagement suggestions x negative emotionality interaction; (b) Primary control engagement suggestions predicting disengagement coping at low, moderate, and high levels of negative emotionality.

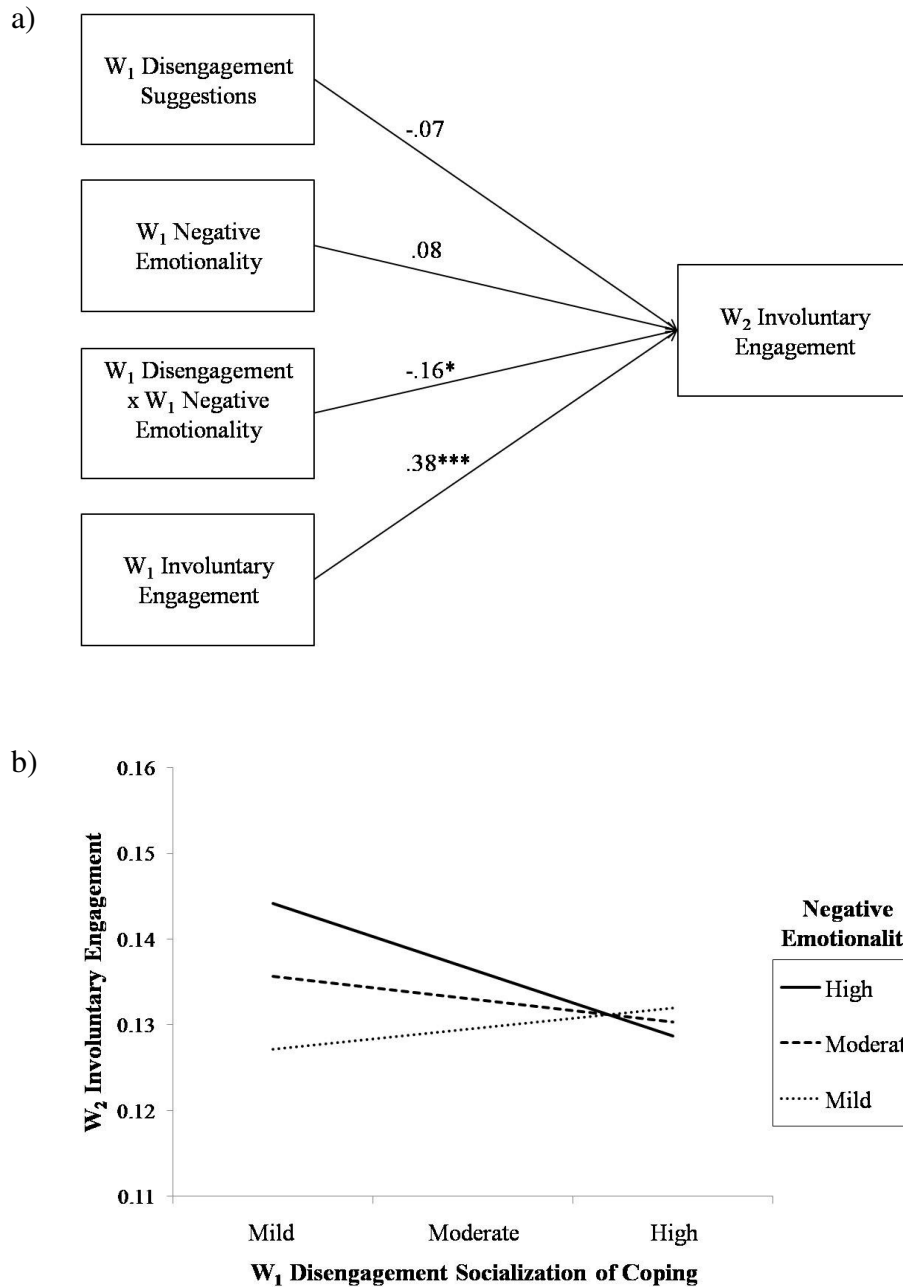


Figure 4. (a) Path model predicting involuntary engagement responses from disengagement, negative emotionality, and the disengagement suggestions x negative emotionality interaction; (b) Disengagement suggestions predicting involuntary engagement responses at low, moderate, and high levels of negative emotionality.

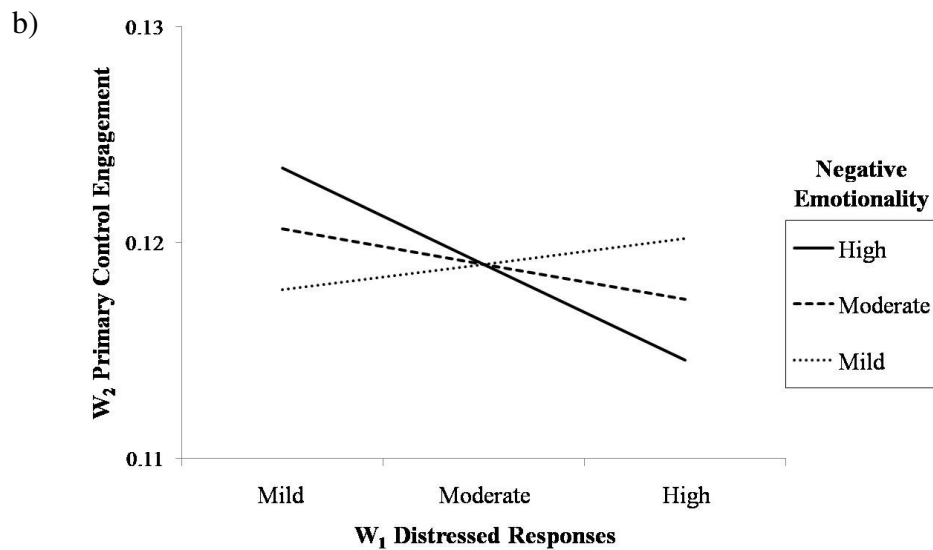
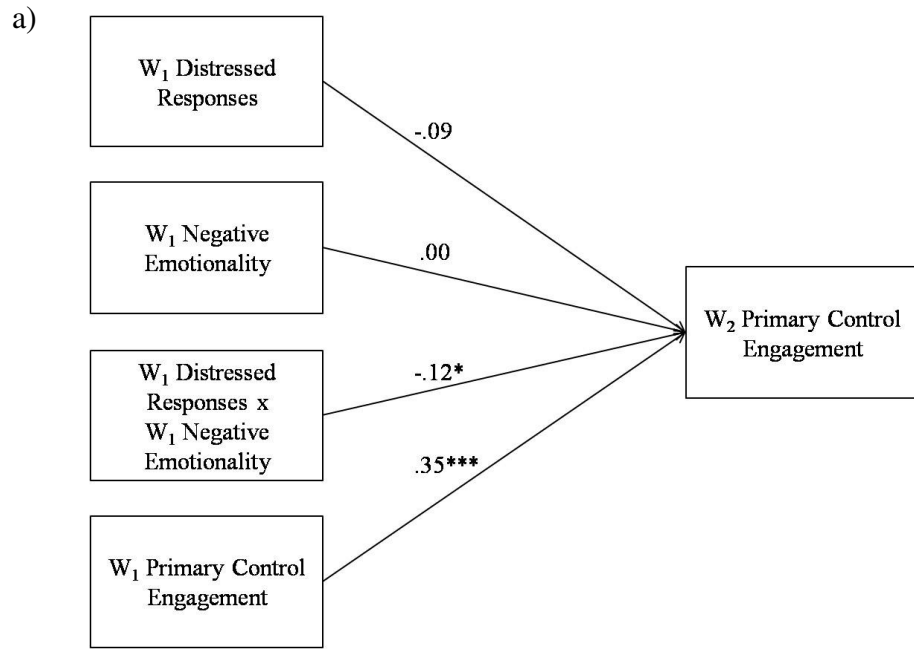
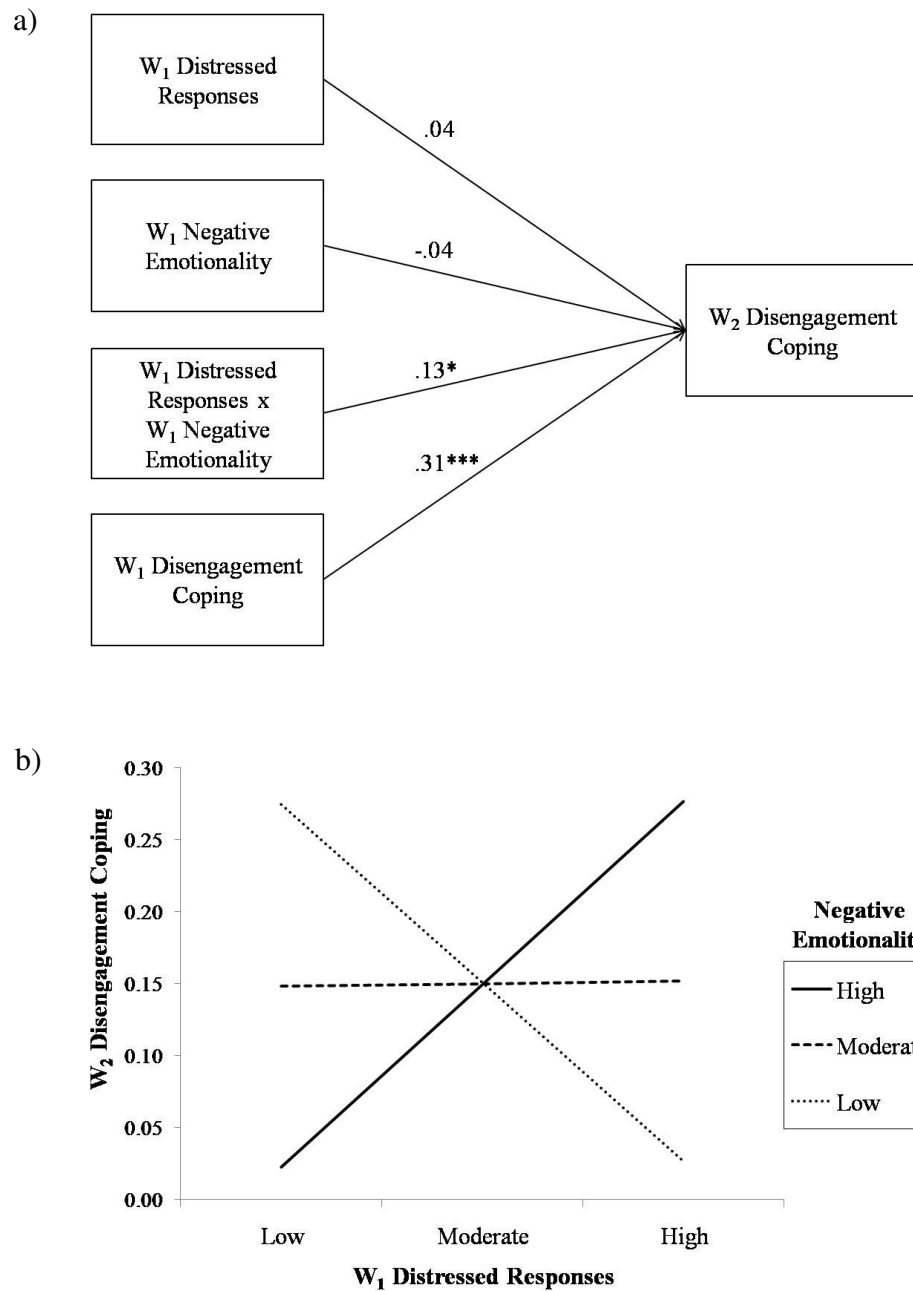
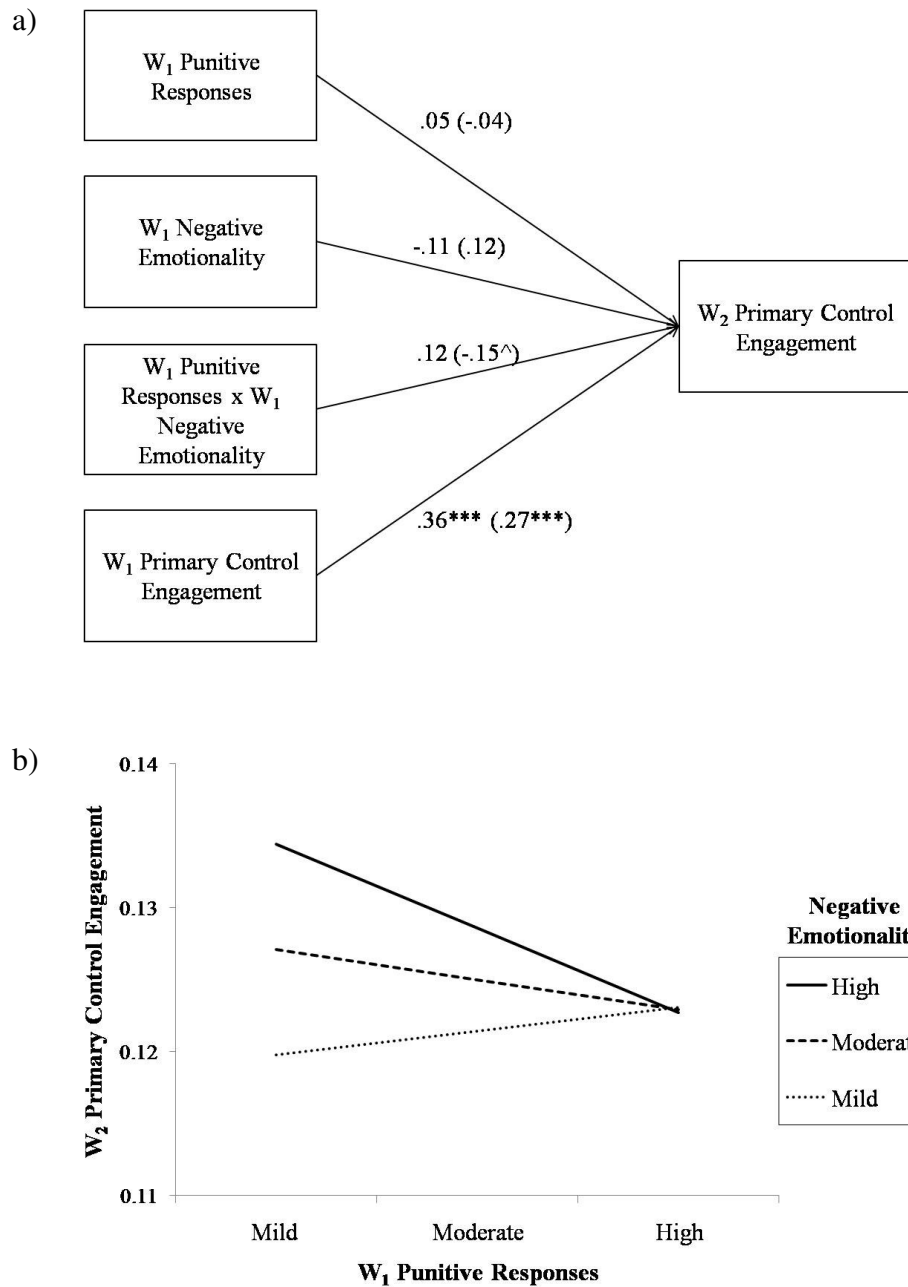


Figure 5. (a) Path model predicting primary control engagement coping from distressed responses, negative emotionality, and the distressed responses x negative emotionality interaction; (b) Distressed responses predicting primary control engagement coping at low, moderate, and high levels of negative emotionality.



*Figure 6.* (a) Path model predicting disengagement coping from distressed responses, negative emotionality, and the distressed responses x negative emotionality interaction; (b) Distressed responses predicting disengagement coping at low, moderate, and high levels of negative emotionality.



*Figure 7.* (a) Path model predicting primary control engagement coping from punitive responses, negative emotionality, and the punitive responses x negative emotionality interaction: Path coefficients for the low victimization group appear outside parentheses, and coefficients for the high victimization group appear inside parentheses; (b) Punitive responses predicting primary control engagement coping at low, moderate, and high levels of negative emotionality.

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Appendix A: Principal Components Factor Analysis of the General Socialization of Coping Questionnaire

When other children are mean to my child, I encourage my child to:	Cognitive Distraction	Primary Control Engagement	Secondary Control Engagement	Behavioral Disengagement
Not focus on the problem.	<b>.86</b>	.04	.11	.20
Not focus on things that make her/him feel bad.	<b>.72</b>	.06	.10	-.02
Keep from thinking about her/his negative feelings.	<b>.66</b>	-.01	-.13	-.10
Try not to think about things that make her/him upset.	<b>.65</b>	.08	.12	-.15
Keep her/his mind off how s/he is feeling by getting involved in other activities.	<b>.54</b>	.07	-.18	-.14
Try to stop her/himself from thinking about the problem.	<b>.52</b>	-.21	-.23	-.18
Think about happy things to take her/his mind off the problem.	<b>.50</b>	-.12	-.31	-.25
Keep busy so that s/he does not focus on the problem.	<b>.39</b>	.01	-.26	-.33
Discuss her/his feelings with me or others.	-.05	<b>.77</b>	-.05	.02
Think about ways to deal with the problem.	-.08	<b>.75</b>	.00	-.06
Let someone know how s/he feels.	.01	<b>.73</b>	-.05	.09
Get help from me or others when figuring out how to deal with his/her feelings.	.14	<b>.70</b>	-.10	.15
Do something to try to fix the problem or take action to change things.	-.01	<b>.62</b>	.01	-.16
Do something to calm her/himself down.	.15	<b>.51</b>	-.04	-.20
Look for something good in what is happening.	-.10	.03	<b>-.84</b>	.07
Find something positive that came from the experience.	-.07	.18	<b>-.78</b>	.11
Think about things s/he is learning from the situation.	-.12	.25	<b>-.73</b>	.03



Appendix A continued

Think of ways to laugh about it so it won't seem so bad.	.36	-.14	<b>-.63</b>	.04
Think that everything will be all right.	.06	-.03	<b>-.38</b>	-.21
Stay away from people and things that make her/him upset.	-.10	-.01	.04	<b>-.89</b>
Stay away from people and things that remind her/him of the problem.	.03	.13	.13	<b>-.80</b>
Keep away from things that make her/him feel bad.	.07	-.05	-.07	<b>-.72</b>
Keep away from things related to the problem.	.31	.15	.03	<b>-.55</b>

Appendix B: Situational Socialization of Coping Questionnaire (Adapted from Coping with Children's Negative Emotions Scale)

Item	Subscale
<b>1. If my child gets into a physical fight with a bully at school and comes home upset, I would:</b>	
a. talk with my child about other ways to deal with the bully next time (besides fighting).	Primary Control Engagement
b. tell my child that everything will be all right.	Secondary Control Engagement
c. tell my child that s/he is overreacting.	Punitive Responses
d. feel upset myself.	Distressed Responses
e. suggest that my child stay away from the bully next time.	Disengagement
f. encourage my child to talk about how the bully made her/him feel bad.	Expressive Encouragement
<b>2. If my child does not want to ride the school bus because a bully on the bus has been rude to her/him recently, I would:</b>	
a. help my child think of ways to laugh about it so it won't seem so bad.	Secondary Control Engagement
b. scold my child for not sticking up for her/himself.	Punitive Responses
c. suggest that my child find a seat away from the bully.	Disengagement
d. encourage my child to talk about how it feels bad to be bullied.	Expressive Encouragement
e. feel upset and uncomfortable because of my child's distress.	Distressed Responses
f. help my child think of ways to deal with the bully.	Primary Control Engagement
<b>3. If my child comes home from school upset because another kid at school has spread a false rumor about her/him, I would:</b>	
a. feel upset myself.	Distressed Responses
b. encourage my child NOT to spend time with the kid who spread the rumor.	Disengagement
c. help my child figure out how to deal with her/his feelings.	Primary Control Engagement
d. help my child think of ways to laugh about it so it won't seem so bad.	Secondary Control Engagement
e. encourage my child to talk about her/his feelings about the rumor.	Expressive Encouragement
f. scold my child for worrying about what other kids think of her/him.	Punitive Responses

Appendix B continued

<b>4. If my child is playing with other children and one of them calls her/him names, and my child becomes upset, I would:</b>	
a. tell my child s/he is overreacting.	Punitive Responses
b. encourage my child to talk about how it hurts to be teased.	Expressive Encouragement
c. encourage my child to stay away from kids who tease her/him.	Disengagement
d. tell my child s/he will get through it.	Secondary Control Engagement
e. help my child think of constructive things to do when other children tease her/him.	Primary Control Engagement
f. feel upset myself and uncomfortable because of my child's distress.	Distressed Responses
<b>5. If another kid shoves my child aside at the playground swings and my child becomes upset, I would:</b>	
a. encourage my child NOT to play with kids who push and shove on the playground.	Disengagement
b. tell my child that s/he will feel better soon.	Secondary Control Engagement
c. help my child think of ways to calm her/himself down.	Primary Control Engagement
d. feel upset myself.	Distressed Responses
e. tell my child that if s/he doesn't calm down we'll have to leave the playground.	Punitive Responses
f. encourage my child to express her/his feelings.	Expressive Encouragement
<b>6. If my child is at a park and appears upset because the other children won't let her/him play with them, I would:</b>	
a. tell my child that if s/he starts crying we'll have to go home right away.	Punitive Responses
b. feel upset and uncomfortable because of my child's distress.	Distressed Responses
c. encourage my child to talk about how it hurts to be left out.	Expressive Encouragement
d. tell my child s/he will feel better soon.	Secondary Control Engagement
e. suggest ways my child can keep her/his feelings under control in front of other children.	Primary Control Engagement
f. suggest that my child stay away from those children.	Disengagement

Appendix C: Temperament in Middle Childhood Questionnaire, Negative Emotionality Items

<b>My child:</b>	<b>Subscale</b>
Has a hard time settling down after an exciting activity. (R)	Soothability
Is very difficult to soothe when s/he has become upset. (R)	Soothability
Cheers up quickly.	Soothability
When s/he cries, tends to cry for more than a couple of minutes at a time. (R)	Soothability
Remains upset for hours when someone hurts his/her feelings. (R)	Soothability
When angry about something, s/he tends to stay upset for five minutes or longer. (R)	Soothability
Has a hard time going back to sleep after waking in the night. (R)	Soothability
Feels nervous for a long time after being scared. (R)	Soothability
Tends to become sad if plans don't work out.	Sadness
Sometimes appears to be downcast for no reason.	Sadness
Becomes sad when told to do something s/he does not want to do.	Sadness
Cries sadly when a favorite toy gets lost or broken.	Sadness
Becomes tearful when tired.	Sadness
Is told by others to "cheer up" and be happier.	Sadness
Her/his feelings are easily hurt.	Sadness
Seems to feel down when unable to accomplish a task.	Sadness
Feels sad frequently.	Sadness
Tends to feel sad even when others are happy.	Sadness
Gets very angry when another child takes his/her toy away.	Anger
Gets angry when called in from play before s/he is ready to quit.	Anger
Gets angry when s/he can't find something s/he is looking for.	Anger
Gets angry when s/he has trouble with a task.	Anger
Gets angry when s/he makes a mistake.	Anger
Has temper tantrums when s/he doesn't get what s/he wants.	Anger
Gets mad when provoked by other children.	Anger

*Note.* Items marked (R) are reverse-coded.

## Appendix D: Short Mood and Feelings Questionnaire Items

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**In the past two weeks:**

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I felt unhappy or miserable.

I didn't enjoy anything at all.

I felt so tired I just sat around and did nothing.

I was very restless.

I felt I was no good anymore.

I cried a lot.

I found it hard to think properly or concentrate.

I hated myself.

I felt I was a bad person.

I felt lonely.

I thought nobody really loved me.

I thought I could never be as good as other kids.

I felt I did everything wrong.

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## Appendix E: Responses to Stress Questionnaire

<b>When other kids are mean to me:</b>	<b>Subscale</b>
I try to think of different ways to change or fix the problem.	Primary Control Engagement
I let someone know how I feel.	Primary Control Engagement
I get help from other people when I'm trying to figure out how to deal with my feelings.	Primary Control Engagement
I do something to try to fix the problem or take action to change things.	Primary Control Engagement
I get sympathy, understanding, or support from someone.	Primary Control Engagement
I do something to calm myself down.	Primary Control Engagement
I decide I'm okay the way I am, even though I'm not perfect.	Secondary Control Engagement
I realize I just have to live with things the way they are.	Secondary Control Engagement
I think about happy things to take my mind off the problem or how I am feeling.	Secondary Control Engagement
I tell myself that things could be worse.	Secondary Control Engagement
I think about all the things I'm learning, or something good that will come from the problem.	Secondary Control Engagement
I tell myself that everything will be all right.	Secondary Control Engagement
I think of ways to laugh about it so that it won't seem so bad.	Secondary Control Engagement
I imagine something really fun or exciting happening in my life.	Secondary Control Engagement
I wish that I were stronger, smarter, or more popular so that things would be different.	Disengagement
I try not to think about it, to forget all about it.	Disengagement
I wish that someone would just come and get me out of the mess.	Disengagement
I try to stay away from people and things that make me feel upset or remind me of the problem.	Disengagement
I say to myself, "this isn't real."	Disengagement
I try to believe it never happened.	Disengagement
I try not to feel anything.	Disengagement
I act like it never happened.	Disengagement
I wish that the problem would just go away, that everything would work itself out.	Disengagement

Appendix E continued

I feel sick to my stomach or get headaches.	Involuntary Engagement
I keep remembering what happened or can't stop thinking about what might happen.	Involuntary Engagement
I get really jumpy.	Involuntary Engagement
I keep thinking about the problem when I try to sleep, or I have bad dreams about it.	Involuntary Engagement
I keep thinking about how I am feeling.	Involuntary Engagement
Right away I feel really angry, sad, scared, or worried.	Involuntary Engagement
I keep thinking about what I did or said.	Involuntary Engagement
Sometimes I act without thinking.	Involuntary Engagement
I get upset by things that don't usually bother me.	Involuntary Engagement
Sometimes I can't control what I do or say.	Involuntary Engagement
I just have to get away, I can't stop myself.	Involuntary Disengagement
I just can't be near anything that reminds me of the situation.	Involuntary Disengagement
I really don't know what I feel.	Involuntary Disengagement
I don't feel like myself, it's like I'm far away from everything.	Involuntary Disengagement
I end up just lying around or sleeping a lot.	Involuntary Disengagement
I can't seem to get around to doing things I'm supposed to do.	Involuntary Disengagement
My mind just goes blank, I can't think at all.	Involuntary Disengagement
It's really hard for me to concentrate or pay attention.	Involuntary Disengagement

## Appendix F: Social Experiences Questionnaire: Self Report

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**How often:**

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do you get hit by another kid?  
do other kids leave you out on purpose when it's time to play or do an activity?  
does another kid yell at you or call you mean names?  
does a kid who is mad at you try to get back at you by not letting you in their group anymore?  
do you get pushed or shoved by another kid?  
does another kid tell lies about you to make other kids not like you anymore?  
does another kid kick you or pull your hair?  
does another kid say they won't like you unless you do what they want you to do?  
does another kid try to keep others from liking you by saying mean things about you?  
does another kid say they will beat you up if you don't do what they want you to do?  
does a friend spread rumors because they are mad at you?  
does a friend who is mad at you ignore you or stop talking to you?  
does a friend threaten to not see you anymore to get even with you (for example, not come over to your house to play or not sit with you at lunch)?  
does a friend threaten to stop being your friend to hurt you or to get their way?  
does a friend get even with you by spending time with new friends instead of you?  
do you get teased by another kid?  
does another kid insult you or put you down?  
is another kid rude to you?  
do you get pinched by another kid?  
does another kid trip you on purpose?  
does another kid swear or cuss at you?

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