

## **ABSTRACT**

CRAIG, ASHLEY B. Young Adults' Coping Strategies as Associated with Perceptions of Their Coping Socialization Experiences and Their Schemas about Their Parents. (Under the direction of Amy G. Halberstadt, Ph.D.)

Research on the development of coping is still in its infancy and has received only limited empirical attention despite numerous calls for its investigation (Kliewer, Sandler, & Wolchik, 1994; Compas, 1998; Power, 2004). In response to the need for an organizing model, Kliewer et al. (1994) developed a model depicting parents' socialization of children's coping during childhood. Specifically, parents might socialize children's repertoire of coping strategies through their own modeled behavior, explicit suggestions about how to cope, and the global environment that they provide. Because young adults show a marked increase in reports of everyday stress relative to younger children (Aldwin et al., 1996), it is especially important to examine factors that predict successful coping in this developmental period. Therefore, the current study examined the three potential pathways of coping development proposed by Kliewer and colleagues (1994) in a sample of young adults who, because of their better developed cognitive capacities and more finely-tuned emotion-related skills, may be more aware of parents' coping and more capable of integrating their observations into their own behaviors. Because theoretical advances call for understanding the role of children as active participants in their own socialization process (Scarr, 1992) and because Eisenberg and colleagues (1998) suggested that children are more open to parents' socialization efforts when the parent-child relationship is positive, the current study examined young adults'

schemas about their parents as not only a direct predictor, but also a moderator of parents' coping socialization behaviors and young adults' coping strategies. Using regression analyses, the current study provides evidence that young adults' perceptions of their parents' coping behaviors and suggestions are predictive of young adults' own self-reported coping behaviors. Further, gender was a significant moderator between perceptions of parents' avoidance behaviors and suggestions and young adults' avoidance coping. Contrary to prediction, young adults' schemas about parents were not directly related to young adults' coping behaviors. However, young adults' schemas about their parents were significant moderators for a number of the relations between their perceptions of parents' coping behaviors and suggestions and their own self-reported coping behaviors. The results from the current study provide the first evidence that young adults' beliefs about their parents do matter for their own coping development.

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Young Adults' Coping Strategies as Associated with Perceptions of Their Coping  
Socialization Experiences and Their Schemas about Their Parents

by  
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## **BIOGRAPHY**

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## **Introduction**

The parent-child relationship is an important context for the development of coping (Cox, Mezulis, & Hyde, 2010; Kliewer, Sandler, & Wolchik, 1994; Power, 2004). Specifically, through parents' explicit (e.g., coaching) and implicit (e.g., modeling) behaviors, children learn to manage their experience of certain emotions, including stress (Eisenberg, Cumberland, & Spinrad, 1998; Kliewer, 1994). Because parents vary in their use and suggestions of effective and ineffective coping strategies, children may also vary in their use of certain effective and ineffective coping strategies, and in ways that reflect the styles of their parents. Therefore, it is important to uncover the parenting behaviors that may promote effective and ineffective coping strategies.

Young adults appear to have an especially marked increase in everyday stress (Aldwin, Suttong, Chiara, & Spiro, 1996), which is likely a result of the numerous stressful transitions for individuals in this developmental period, in conjunction with their still developing coping strategies (Skinner & Zimmer-Gembeck, 2007). Parents' influence in the development of their children's coping abilities has been well-documented in childhood and adolescence, but little is known about how parents' continue to help shape their children's coping as they enter adulthood. Thus, it is the goal of the current study to examine the continuing contributions of parents to coping development of young adults.

Research on the development of coping is still in its infancy and has received limited empirical attention despite numerous calls for its investigation (Compas, 1998; Kliewer, Sandler, & Wolchik, 1994; Power, 2004). In response to the need for an organizing model, Kliewer et al. (1994) developed a model depicting parents' socialization of children's coping

during childhood. Specifically, parents might socialize children's repertoire of coping strategies through their own modeled behavior, explicit suggestions about how to cope, and the global environment that they provide. This model also predicted a mediational pathway whereby family environment was expected to fully explain the relationship between modeling, coaching, and coping (Kliewer et al., 1994). Although their own findings did not fully support their model, its concordance with the major model on the socialization of emotion (Eisenberg, Cumberland, & Spinrad, 1998) suggests the importance of further exploration of socialization influences on children's coping strategies.

Moreover, theoretical advances call for understanding the role of children as active participants in their own socialization process (Scarr, 1992). Yet the model proposed by Kliewer and colleagues (1994) assumed the child to be a passive component in the developmental process. Thus, the present study examines the three potential pathways of coping development proposed by Kliewer and colleagues (1994) in a sample of young adults, with the goal of better understanding the relationships between adult children's coping strategies and those of their parents. Indeed, Eisenberg and colleagues (1998) suggested that children are more open to parents' socialization efforts when the parent-child relationship is positive. Therefore, I considered young adults' perceptions of parents' qualities as a moderator of parents' behaviors and young adults' coping strategies, in addition to assessing the direct pathway between perceptions of parents' qualities and young adults' coping. Parent and child gender were also explored. See Figure 1 for an illustration of the proposed model.

The current study has four aims:

Aim 1. The first aim was to determine the relation between parents' modeled coping behaviors and young adults' coping behaviors (1a) and whether these relations would vary by parent and child gender (1b).

Aim 2. The second aim was to determine the relation between perceptions of parents' explicit coping suggestions and young adults' coping behaviors (2a) and whether these relations would vary by parent and child gender (2b).

Aim 3. The third aim was to determine the relation between young adults' schemas about parents and their direct effects on young adults' coping behaviors (3a) and whether these relations would vary by parent and child gender (3b).

Aim 4. The fourth aim was to determine whether young adults' schemas about parents would moderate the relations between parents' modeled behavior (4a) and coaching of children's stress management (4b) on young adults' coping behaviors.

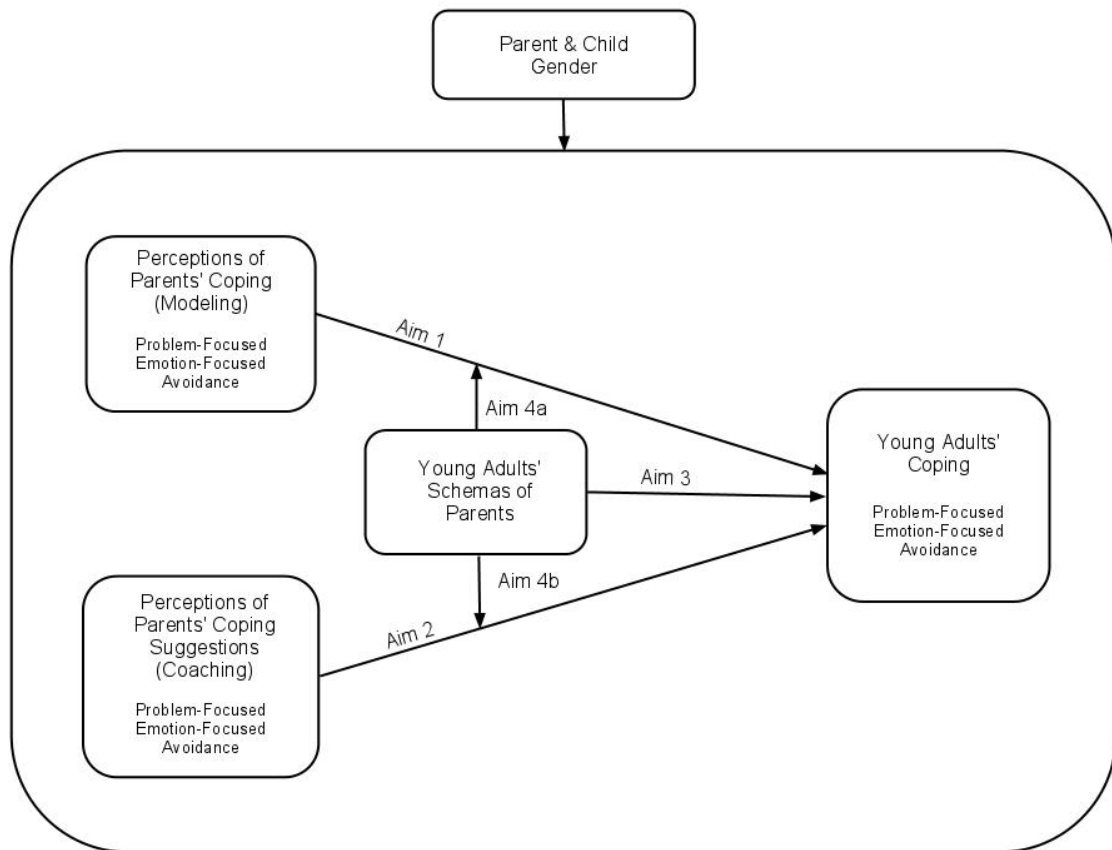


Figure 1. Hypothesized model of relations between young adults' perceptions of parents' coping socialization behaviors, schemas about parents, and coping strategies.

*Note:* Parent and child gender are hypothesized to moderate all direction relations in the proposed model.

First, I briefly define and then review the coping strategies of interest, report on evidence of their effectiveness, and identify relevant gender differences. Second, I discuss the ways in which parents may model coping behaviors to their children and how modeled behavior may relate to young adults' coping behaviors. Third, I discuss how parents' explicit coping suggestions may relate to young adults' coping behaviors. Fourth, I discuss previous research about the influence of parents' qualities on children' coping. Finally, for both parents' own coping and their coping suggestions, I outline why young adults' schemas of their parents might function as a moderator. When relevant, I outline how and why relationships amongst constructs may vary by parent and child gender.

### **Coping**

Coping is the ability of an individual to successfully regulate his/her emotions, thoughts, behaviors, physiological arousal, and responses in order to change or decrease the sources of stressful events or circumstances (Aldwin, 1994; Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Lazarus & Folkman, 1984). Within the coping literature there have been a number of labels for specific coping processes, including problem-focused and emotion-focused (Lazarus & Folkman, 1984) or passive and active coping (Billing & Moos, 1981; Ebata & Moos, 1991), among others (for a review, see Compas et al., 2001). However, there has been some criticism regarding the simplicity of these two-factor models (Carver, Scheier, & Weintraub, 1989). In response, Carver and colleagues (1989) developed a four-factor model that continued to include problem-focused coping, but that separated emotion-focused into two groupings with one including support-seeking, regardless of purpose, and the other including strategies such as acceptance and



positive reframing. They also distinguished a non-constructive category they called “Disengagement,” a factor fairly synonymous with avoidance. Interestingly, their factor that included both types of support-seeking (instrumental and emotional) loaded on both the problem-focused and disengagement factors, which in some ways ends up supporting a three-factor structure rather than their proposed four-factor structure. In sum, three types of coping, specifically, problem-focused (including instrumental support-seeking), emotion-focused (including emotional support-seeking), and avoidance, seemed to provide the most promising set of distinct types of coping to pursue in the present research.

Problem-focused coping occurs when one directs attention and efforts toward the stressor (Ayers et al., 1996; Ebata & Moos, 1991). For instance, young adults may experience stressors related to their performance in a college class. To reduce their experience of stress they may increase their time studying the material or seek out the support from others to improve their grades. Emotion-focused coping is another more active form of coping, but rather than focusing on solving the stressor, emotion-focused coping acts to ameliorate the negative emotional effects that result from a stressor. This kind of coping strategy may be manifested in young adults’ seeking emotional support from their peer groups or family members or attempting to find the “silver lining” in a difficult situation.

Young adults who utilize an avoidance coping approach may simply ignore stressors in the hope that they will resolve themselves. Young adults may also attempt to avoid stress about poor classroom performance by distracting themselves with other things or by venting their emotions. In other words, young adults could focus on how poorly they are doing in the classroom and discuss their disappointment and frustration regularly with no overt attempts

to alter their behavior, environment, or feelings (for review, see Carver, Scheier, & Weintraub, 1989).

Overall, problem- and emotion-focused strategies appear to be associated with fewer internalizing and externalizing behaviors and greater social and academic competence relative to avoidance coping strategies (Compas et al., 2001; Ebata & Moos, 1991; Seiffge-Krenke & Klessinger, 2000; Valiente, Fabes, Eisenberg, & Spinrad, 2004). For example, after controlling for age, gender, health, and type of stressor, adolescents who were more likely to engage in problem- and emotion-focused strategies like problem-solving and reappraisal reported greater well-being and less distress relative to adolescents who attempted to cope via avoidance (Ebata & Moos, 1991). Further, the greater proportion of approach strategies (i.e., problem- and emotion-focused) to avoidance strategies utilized by those same adolescents lead to even greater benefits to well-being. Longitudinal studies examining the stability of coping strategies over time have found that adolescents who use an avoidant coping style, even if only at one time point, report higher levels of depression than those adolescents who consistently report utilizing approach-oriented coping strategies (Seiffge-Krenke & Klessinger, 2000). Given the numerous psychological consequences of ineffective stress management, it behooves researchers to better understand the developmental course of coping strategies that effectively and ineffectively facilitate the management of stress.

The current study takes a dispositional perspective (see Moos & Holahan, 2003 for review) of coping as it was the intent to better understand the parental underpinnings of young adults' general tendencies towards stress management. There is sufficient evidence

that individuals have stability in their coping styles. For instance, adolescents report relatively high stability in their self-reports of coping strategies across similar situations; and even across diverse situations their stability is significant (Compas et al., 1988). Individuals' general coping tendencies have been found to be strongly predictive of future situation-specific coping efforts (Monnier, Hobfoll, Dunahoo, Hulsizer, & Johnson, 1998). Moreover, dispositional coping appears to be more related to general well-being and long-term emotional health, whereas situational coping mostly works to ameliorate context dependent emotional reactions (Carver & Scheier, 1994; Monnier et al., 1998).

Given the rather robust gender differences in internalizing (e.g., depression, anxiety) and externalizing (e.g., aggression) behaviors and socioemotional competence (Graber & Sontag, 2009; Nichols, Graber, Brooks-Gunn, & Botvin, 2006), gender differences in coping may be at least one mechanism for these differences. Women are generally shown to exhibit more emotional responses and experience greater rumination in the face of stressors, whereas men have been shown to either tackle stressors head-on or to avoid their stressful reactions all together; these differences are apparent at all stages of development (Cox, Mezulis, & Hyde, 2010; Eschenbeck, Kohlman, & Lohaus, 2007; Sontag & Graber, 2010). Although there is moderate empirical support for gender differences in coping, these differences are often clouded by a lack of consistency of terms and constructs within the coping literature. In a meta-analysis of 50 studies examining gender differences in coping from 1990 to 2000, Tamres, Janicki, and Helgeson (2002) carefully examined gender differences in very specific coping strategies based on the descriptions of coping behaviors rather than the broad labels assigned by the studies' authors. They found that women were more likely to use nearly all

the coping strategies examined (10 of 11 strategies) relative to men; however, the effect sizes were quite small (effect sizes ranged from .01 to .20). Thus, it appears that women are slightly more likely to engage in both effective *and* less effective coping strategies relative to men. However, it is not clear whether it is actually that women are more diverse in their coping strategies or if they are simply more aware of their coping strategies than are men. Further, the assessment of Tamres et al. (2002) concluded that specific coping strategies might be more or less effective for men and women. Of importance to the present study is how these gender differences in adults' coping strategies may be socialized. In the remaining sections, I discuss the role parents have in the development of coping; possible pathways for the socialization of gender differences will be noted.

### **Young Adults' Perceptions of Parents' Modeled Coping Behaviors (Aim 1)**

According to social learning theory, children observe and model the behaviors and emotional responses of others (Bandura, 1977). Within a family context, researchers have suggested that when children experience stress or are in a stressful situation they will look to their parents to determine how they are responding to the stressor and then manage their own stress response accordingly (Barrett & Campos, 1987; Biringen, Clyman, & Oppenheim, 1991) Thus, I would expect a positive relationship between parents' specific coping strategies and those same coping strategies of their children.

Given the relative newness of the coping development literature, no studies have explicitly examined parents' real-time coping behaviors and the subsequent coping strategies enacted by their children at any age. However, two studies approximate this relationship by asking parents about their coping behaviors and then asking their children about their coping

behaviors. The first of these utilized a sample of Israeli adolescent boys and their mothers and found that coping strategies of mothers were strongly predictive of similar coping strategies of their adolescent sons (Hoffman & Levy-Shiff, 1994). In fact, mothers' self-reported coping strategies accounted for nearly half of the variance in adolescent boys' emotion-focused strategies and roughly one-third of the variance in adolescent boys' problem-focused coping strategies.

The second of these studies examined the self-reported coping strategies of mothers and fathers in the U.S. and the self-reported coping strategies of their 9- to 12-year old children (Kliewer et al., 1996). Fathers' self-reported use of problem-focused coping (but not other forms of coping, or mothers' coping) was predictive of boys' self-reported use of active coping. On the other hand, parents' emotion-focused coping was a predictor of children's support seeking, though only in other-gender dyads (viz., father-daughter and mother-son).

In sum, there is some, albeit limited, evidence that parents' own emotion management behaviors serve as implicit socialization messages for their children, which may lead children to enact similar emotion management strategies (e.g., coping). However, given other literatures that highlight strong effects of children's observations in other domains (e.g., gendered behaviors, aggression, etc.), it is somewhat surprising that there are not stronger relationships, both in number and in strength, between parents' coping and emotion management behaviors and children's own coping strategies.

There are a number of potential reasons why the relationships between parents' own coping have not been more consistently related to children's actual coping strategies. First, parents reported their own coping behaviors in general, rather than the coping strategies they

use in the presence of their children. The coping strategies parents use in other domains of their lives may not be the same as the coping strategies they use in their role as parents as indicated by other studies of parents' modeled behavior (e.g., racial socialization; Hughes, Bachman, Ruble, & Fulgini, 2006). Moreover, because only parents' self-reports of their coping behaviors were examined, the aforementioned studies were not able to account for the actual messages children receive from their parents. Consistently, previous research demonstrates that children's perceptions of their environment/relationships are more predictive of their own behavior than are the perceptions of others (e.g., parents, teachers) (Bogenschneider & Pallock, 2008; Dittus & Jaccard, 2000; Hughes et al., 2006; Guilamo-Ramos, Jaccard, Dittus, & Bouris, 2006; Schwarz, Barton-Henry, & Pruzinsky, 1985). Greater consistency between children's perceptions and their own behaviors could be explained by shared method variance, but given how disparate children's perceptions and parents' reports have been in other areas (Gecas & Schwalbe, 1986; Pelegrina, Garcia-Linares, & Casanova, 2003; Smith, Miller, Kroll, Simmons, & Gallen, 1999) it may be that children are not "picking up" on what parents say they are doing (Hughes et al., 2006).

In addition, middle school aged children may not be fully able to attend to the nuances of parents' modeling of coping strategies for several reasons. For one, children in middle school are still fairly self-focused (Flavell, 1999) and thus may not be attending well to others' coping styles. Parents may also know this, leading to less frequent and thorough coaching. For this reason it is possible parents do not effectively communicate to children the complexities of more active coping strategies, because of their awareness of children's developmental limitations in emotion regulation. Alternatively, if parents are coping

effectively, their children may not even be aware that coping is occurring (Goodwin et al., 2006). Young adults may be more aware of others' emotions and the nuances of others' coping efforts than are children and younger adolescents, thereby making them better observers of parental models of coping (Hoffman & Levy-Shiff, 1994). Therefore, the present study capitalized on young adults' heightened emotional maturity and more complex understanding of others to better estimate the relationship between young adults' retrospective observations of their parents' coping behaviors and their own coping strategies.

### **Young Adults' Perceptions of Parents' Explicit Coping Suggestions (Aim 2)**

Parents may also help to construct their children's coping repertoire by providing explicit instructions when their children are faced with stressful situations (Eisenberg, Fabes, & Murphy, 1996). Parents who provide constructive feedback to their children when children are experiencing distress provide them opportunities to more effectively regulate their emotions and to learn better ways to manage distressing situations (Eisenberg & Fabes, 1994). Parents may instruct children on ways to make themselves feel better (emotion-focused), to get assistance from wiser others (problem-focused), or to turn their attention away from the stressor all together (avoidance). Despite what would seem to be a fairly direct link between parents' explicit coaching and children's behaviors, little is known about the relationship between parents' coaching of specific coping strategies and children's actual coping behaviors. As a result, much of what we know about parents' explicit influence on children's coping comes from literature examining parents' reactions to children's negative emotions (e.g., sadness), which may be tangentially related to coping suggestions, or from

work examining parents' reports of their coping suggestions, suggestions that may or may not be incorporated into their children's working models of emotion management.

For example, Eisenberg and colleagues (1992), asked parents of 3- to 5-year-olds to report how likely they were to react to children's negative emotions in a variety of ways and then assessed the relationships these reactions had to children's social competence and coping. Parents' reports of punitive reactions were associated with children's avoidance coping as reported by mothers, whereas parents' reports of problem- and emotion-focused strategies were associated with children's constructive coping strategies.

In another study of parents and elementary school age children, parents were again asked to report how likely they are to respond to their children's negative emotions in particular ways (Eisenberg, Fabes, & Murphy, 1996). The authors found that, in general, mothers' minimizing reactions were particularly related (positively) to children's avoidant coping as reported by both mothers and teachers, whereas mothers' problem-solving reactions were positively related to children's more active coping strategies as reported by both mothers and teachers. However, fathers' reactions did not predict children's coping. It is important to note that, with the exception of fathers' reports of their own reactions, mothers and teachers provided nearly all the data in this study. Thus, it may be that relationships were found for mothers due to reporter bias.

Kliewer and colleagues' (1996) analysis of the tripartite model of coping with 9- to 12-year old children found a number of significant correlations between parents' self-reported coping suggestions and their children's self-reported coping behaviors. To review, they found that mothers' avoidance suggestions were related to higher rates of daughters'



reported avoidance coping. Additionally, mothers' support-seeking suggestions were related to daughters' support-seeking strategies. Fathers' suggestions were predictive of sons' coping behaviors such that fathers' support-seeking suggestions were related to sons' use of distraction. In another community sample of mothers and their 10- to 14-year old children, the researchers found that mothers who coached their children on how to manage their anger had children who were better able to regulate their anger (Shortt, Stoolmiller, Smith-Shine, Eddy, & Sheeber, 2010).

In sum, there is evidence for the direct influence of parents' reports of explicit coping instructions and children's actual strategy use, especially for more advanced coping strategies like problem-focused strategies. To date, work in this area has focused on the suggestions parents provide to younger children. Thus, we do not yet know what, if any, suggestions older adolescents and young adults may be receiving from their parents. Parents of older adolescents and young adults may provide more complex strategy suggestions to their adult children, suggestions that may be more fully integrated into young adults' coping strategies. Further, because previous research has only examined what parents report telling their children but has not yet explored what children are actually hearing from their parents, we cannot assume that these two questions result in the same answer (Hughes et al., 2006; Smith et al., 1999). Therefore, the current study examines young adults' perceptions of their parents' coping suggestions and the relationship between these perceived suggestions and young adults' reported strategy use.

### **Young Adults' Schemas about Parents' (Aim 3)**

Parenting behaviors have lasting effects on the psychological and emotional adjustment of individuals throughout the lifespan (Mallers, Charles, Neupert, & Almeida, 2010; Shaw, Krause, Chatter, Connell & Ingersoll-Dayton, 2004). Individuals who report having supportive, warm, and nurturing parents tend to have higher self-esteem, greater well-being, and better socioemotional competence than individuals from less desirable families (Mallers et al., 2010; Papini, Roggman, & Anderson, 1991; Power, 2004). Conversely, individuals from unsupportive, cold, and distant families experience higher levels of distress, depression, and other psychological and emotional dysfunctions than individuals from more nurturing environments (Taylor et al., 2004; Repetti, Taylor, & Seeman, 2002). Generally this relationship has been explained in terms of the positive buffering effects of familial support on the experience of stress (Cobb, 1976; Mallers et al., 2010). For example, in a recent study of 1031 adults ranging in age from 25- to 74-years-old, participants were asked to provide retrospective data about their parents' affection as well as complete a daily diary of their daily stressors and their emotional reactivity (Mallers et al., 2010). Adults' retrospective reports of their parents' affection were negatively related to the number of daily stressors and lower emotional reactivity to those stressors. This pattern was especially strong for men and their perceptions of their fathers' affection. Similarly, male college students' reports of their fathers' support were more related to coping strategy use, particularly with regard to support-seeking, than the perceived support they received from their peers-- a

finding that stands in contrast to the parallel relationships for their female counterparts (Greenberger & McLaughlin, 1998).

Other research on children's coping more specifically demonstrates that parental support, often characterized as including qualities such as warmth, nurturance, or responsiveness, is positively related to effective strategies such as problem- and emotion-focused coping and negatively related to less effective strategies like avoidance (for a review, see Power, 2004). For example, effective coping strategies similar to problem- and emotion-focused were predicted by 15- to 17-year-old adolescents' perceptions of their parents as authoritative, a parenting typology marked by warmth and responsiveness (Dusek & Danko, 1994). In another study, adolescents' (mean age 14.6 years) perceptions of parents as rejecting were related to less effective strategies including depressive reactions and venting of emotions (Meesters & Muris, 2004). Conversely, in the same study, adolescents' perceptions of parental warmth were related to adolescents' increased reports of problem solving (i.e., problem-focused) and the use of comforting thoughts (i.e., emotion-focused).

I predicted that young adults' perceptions of the qualities of their mothers and fathers would relate to their own use of specific coping strategies. Specifically, the more positive young adults' perceive their parents to be, the more likely they should engage in effective coping strategies like problem- and emotion-focused coping. On the other hand, when young adults report negative qualities (e.g., rejection, chaos) about their parents, they should report higher rates of ineffective coping strategies, like avoidance. These relationships may be particularly strong for father-son dyads (Greenberger & McLaughlin, 1998; Mallers et al., 2010).

### **Young Adults' Schemas about Parents as a Moderator (Aims 4a & 4b)**

Developmentalists have been encouraging researchers to consider children's active participation in their own development (Scarr, 1992; Scarr & McCartney, 1983, Skinner, Johnson, & Snyder, 2005; Steinberg, 2001). Specifically, Scarr (1992) suggests that children construct their own realities and that these constructions have a large impact on the variations of child outcomes. This dynamic has been described in terms of a motivational model, in which children who perceive their parents in positive ways are more open to and more motivated by their parents' socialization attempts (Darling & Steinberg, 1993; Skinner, Johnson, & Snyder, 2005; Steinberg, 2001). Thus, the attributions young adults make about their parents are likely to influence how successful parents' influence will be. If young adults attribute positive qualities to their parents, they may be more likely to integrate their parents' behaviors into their own, to be more open to their parents' suggestions, and to see their parents as a secure base from which to seek reassurance and support. One can imagine that the greater affection a child has toward their mother or father, the more that child may choose to emulate the behaviors and heed the suggestions of that well-liked parent.

Active participation in one's own socialization process is particularly likely for young adults, given their greater autonomy relative to their child counterparts; they have greater opportunity and freedom to accept or reject the messages of their parents (for review, see Smollars & Younis, 1989). Therefore, I predicted that young adults' current feelings about their parents would moderate the relationship between young adults' coping strategies and their reports of their mother's and father's socialization behaviors.

No work to date has explicitly investigated the potential moderating effect of parental

support on the relationship between parenting behaviors and children's use of specific coping strategies, but empirical work exploring development in other domains suggests the promise of this moderational hypothesis. For example, in a short longitudinal study (1 to 3 weeks), toddlers whose relationships with their mothers were marked by high positive regard were more receptive towards their mothers' influence, as demonstrated by greater committed compliance (Kochanska & Aksan, 1995). Further, toddlers' greater committed compliance in the lab predicted better internalization of family expectations as measured by mothers' reports of toddlers' compliance without supervision (e.g., toy cleanup) at a follow-up session in the home 1 to 3 weeks later. Similarly, in a study of adolescents' academic achievement, parents' encouragement and involvement was, not surprisingly, positively related to achievement; this association was strongest when parents demonstrated an authoritative parenting style marked by warmth and responsiveness compared to a more authoritarian style (Steinberg, Lamborn, Dornbusch, & Darling, 1992).

Although the aforementioned studies provide evidence that parenting qualities may moderate the effectiveness of mothers' influence on children's behavior, parenting quality was assessed by either the parent or by an objective observer. The purpose of the present study, however, was to determine the moderating influence of young adults' attributions of their parents, as young adults' attributions may be quite different from parents' self-perceptions. Support for this position comes from a recent study including adolescents' perceptions of their mothers as moderators of the effectiveness between mothers' communications and adolescents' risk behaviors (Guilamo-Ramos, Jaccard, Dittus, & Bouris, 2006). First, only a weak correspondence emerged between mothers' and adolescents'

reports of mother's expertise, trustworthiness, and availability. Second, only adolescents' perceptions were predictive of their risk behaviors; substantiating again that adolescents' perceptions are potentially more influential than those of parents and more "objective" observations by non-involved others. Finally, with regard to the moderating influences of adolescents' perceptions, adolescents who rated their mothers more highly as experts, trustworthy, and available were less likely to be concurrently engaged in risk behaviors (e.g., smoking), indicating that adolescents' perceptions of their mothers may play a role in how likely adolescents are to heed their mothers' suggestions.

To assess young adults' perceptions of parenting qualities, the present study included an assessment of young adults' relationship schemas about their mothers and fathers. A relational schema is essentially the cognitive model an individual has about their relationship with a designated other (for review, see Baldwin, 1992). Each of us has a schema for each of our relationships that allows us to efficiently approach, interact with, and interpret the behaviors of another person; some schemas are generally positive and others are likely more negative. In other words, our interpersonal relationships, just like our experiences with other types of environments, are more than just the sum of their parts, but are in part a function of the ways we construct the relationship to be (Baldwin, 1992; Scarr, 1992).

Relationship schemas have been more comprehensively studied in early and middle childhood through pictorial or narrative representations of caregivers. Research has generally shown that children's schemas of their mothers are predicted by mothers' behaviors in expected ways (Carlson, Sroufe, & Egeland, 2004; MacFie et al., 1999; Shields, Ryan, & Cicchetti, 2001), but more interestingly are predictive of child outcomes. For example, 8- to

12-year old maltreated and nonmaltreated children who had more negative representations of their mothers were more likely to have poorer emotion regulation skills relative to those children who had more positive caregiver representations (Shields et al., 2001). In another study, schema negativity derived from adolescents' open-ended narratives about their mothers and fathers, was related to poorer self-regulation (Bullock, Dishion, & Myers, 2009).

Further, children's representations appear to influence the impact of the early parent-child relationship. In a longitudinal study of children's self- and caregiver representations, parent-child interactions, and children's outcomes, found that children's representations were related to later experiences after controlling for prior experiences (Carlson et al., 2004). These findings suggest that children's mental representations of others have a lasting impact on future outcomes above and beyond the effect of their previous "reality." In addition, adolescents' mental representations of caregivers were also shown to moderate the effect of parents' influence, with early parenting behaviors having greater influence on adolescents' outcomes when adolescents' caregiver representations were more positive (Carlson et al., 2004).

Taken together, these studies suggest that representations children have about their parents can work to enhance or degrade the influence of parents' socialization attempts. This moderating pattern appears to be evident for both parents' implicit (e.g., parents' involvement in school) and explicit behaviors (e.g., communications about risk behaviors). Therefore, I predicted that young adults who report current positive qualities about their parents would show stronger relationships between their retrospective perceptions of parents' behaviors and their own current coping strategies. On the other hand, young adults who

report more current negative qualities about their parents would show weaker (or potentially no relationship) relationships between their retrospective perceptions of their parents' behaviors and their own current coping strategies.

In sum, the present study allows for an exploration of parents' sustaining influence on the development of young adults' coping strategies. In addition to direct relationships between parents' coping and their adult children's coping, I predicted moderated influence, such that young adults would vary in their openness to parents' socialization attempts as a function of their attributions about their parents. To assess these relationships, I focused on the messages that young adults' report receiving from their parents, both explicit (i.e., suggestions) and implicit (i.e., modeling), which is a new approach to the socialization of coping. Thus, I examined both the direct and moderating effect of young adults' perceptions of their relationships with their parents as an important factor for better understanding the effectiveness of parental socialization. To accomplish the aforementioned aims, young adults' perceptions of both their mothers and fathers were assessed to allow for a more thorough investigation of parental socialization of coping.

## **Methods**

### **Participants**

Participants were 235 (128 female, 107 male) undergraduate student volunteers (mean age = 19.11 years old, SD = 2.20 years) enrolled in an Introductory Psychology course at a large southeastern university during the fall 2010 and spring 2011 semesters. Of the 235 participants that enrolled in the study, 232 (127 female, 105 male) completed all of the current study's components. All participants were required to be 18 years of age at the time



of participation and must have had regular, although not necessarily daily, contact with both of their parents throughout their childhood (e.g., if they only lived with one of their parents, then they had contact with the other parent via regular in-person visits or phone contact). On average, participants reported living away from their family of origin for 11.6 months (SD = 17 months). The sample was moderately diverse with 163 students self-identified as European American (70%), 30 students self-identified as African American (13%), 28 students self-identified as Asian (12%), with the remaining 5% identifying as another ethnicity (i.e., Hispanic, Native American, or multi-racial).

Of the 232 participants included in the sample, 207 provided data specifying their relationship with their mother and father, and overwhelmingly students reported they were referencing their biological mother and father (98% and 97%, respectively) when completing the study measures. Participants were also asked about the time of their life they used as a reference when completing the questionnaire measures. In general, participants reported that they had considered an average across their lifetime when thinking about their parents (70%), followed by approximately 23% of participants who reported thinking about their adolescence (14 to 18 years old). Lastly, participants were asked about the amount of time they communicated (e.g., via phone, in person, text, etc.) with their mother and father in a given week. Not surprisingly, participants reported talking with their mothers (mean = 5.7 hours, SD = 13.73 hours) for greater amounts of time during a week than their fathers (mean = 3.8 hours, SD = 11.66 hours), but there no effects for the gender of the participant, indicating that male and female participants were reporting talking with their parents for similar amounts of time during the week.

## **Procedure**

Participants were recruited from Introduction to Psychology courses via a website dedicated to recruiting research participants. Research participation is a component of the Introduction to Psychology courses whereby students must complete either six research credits or a three-page journal article review. Students who participated in the current study had the opportunity to receive up to five research credits for their participation; 1 credit for completing the in-lab parent narrative component, 2 credits for completing the questionnaires relevant to the current study, and 2 credits for completing additional measures not relevant to the current study. Participants were asked to complete all study-related questionnaires within 24 hours of the in-lab narrative component, but in actuality participants were given up to 10 days to complete all components. Participant who did not complete the questionnaires within 24 hours of the in-lab session were given one email reminder 48 hours after their in-lab session. There were no significant differences on any of the study measures by participants' time to completion.

Approval from the university's institutional review board was obtained before data collection began and all students completed an informed consent form prior to the start of data collection. Participants were asked to complete two five-minute audio taped narratives (see Appendix B) as well as a number of questionnaires (see Appendix C). The five-minute narratives were conducted in the lab and afterwards participants were sent a link to an online survey to complete the self-report measures ([www.surveymonkey.com](http://www.surveymonkey.com)). Two versions of the procedure were administered to reduce fatigue effects; that is, interview prompts in the lab

and online questionnaires were both counterbalanced such that half the sample received interview prompts/questionnaires about their mother first (for both the narratives and the online portions) and the other half received interview prompts/questionnaires about their father first. Analyses were conducted to determine if there were any order effects on any of the measures used for the current study, but no significant effects for order were revealed.

Participants always completed the narrative portion first in the lab, and then were given the link to the online questionnaires. Once the participant completed the first open-ended parent narrative, they were then asked to perform the same task about the other parent. Next, participants were asked to complete a collection of questionnaires about perceptions of their mother's behaviors (version 1; version 2: perceptions of fathers' behaviors). Regardless of version, participants completed the measure of their own coping strategies next. Then, participants completed questionnaires about the other parent (version 1: father; version 2: mother) using the same questionnaire order as the previous parent questionnaires. All participants then completed demographic information. Copies of all measures can be found in Appendix C. See Table 1 for a summary of the procedural sequence for each version.

Nearly identical procedures were used in a pilot study, described in Appendix A. The pilot study provided the opportunity to refine the study protocol in terms of instrumentation and the order of study procedures. Second, the pilot study provided the opportunity to test the five-minute interview protocol and the coding scheme used to assess relationship climate. Data regarding the reliability of the coding protocol as well as relationships amongst the coded dimensions and participants' reported coping are provided in Appendix A.

Table 1

*Summary of Tasks Administered in Each Version of the Procedure*

Measure	Task Order	
	Version 1	Version 2
Five-minute speech sample	Mother	Father
Five-minute speech sample	Father	Mother
Parent Coping Socialization Scale-Revised	Mother	Father
Ways of Coping	Mother	Father
COPE	Self	Self
Parent Coping Socialization Scale-Revised	Father	Mother
Ways of Coping	Father	Mother
Demographics	Self	Self

**Measures**

**Coping.** Participants' coping strategies were assessed with the COPE (Carver, Sheier, & Weintraub, 1989). This 53-item questionnaire gives participants the following prompt: "We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what *you* generally do and feel when *you* experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you *usually* do when you are under a lot of stress. When completing this questionnaire, you should treat each question separately from every other question. There are no right or wrong answers for the questions, so please indicate what *you* do rather than what "most people" do." Participants then responded to each using a 4-point Likert-type scale with 1 being "I usually don't do this" to 4 being "I usually do this a lot."

The COPE was developed to include 14 subtypes of coping, but assessing such a large number of coping strategies would have both limited interpretability and, more importantly, did not fit with the goals of the current study. Therefore, for the purposes of the current study, three subscales were created from the COPE: *problem-focused*, *emotion-focused*, and *avoidance*. To determine the factor structure for the current study, I drew on data from a small pilot study (see Appendix A) that suggested that a number of the original 14 subscales were highly correlated and thus could be subsumed into these broader categories<sup>1</sup>, see Appendix A, Table A. Using this information as a guide, I entered all of the respective items for each subscale (i.e., problem-focused, emotion-focused, and avoidance) into separate scale analyses to determine internal reliability. For each subscale, items were eliminated if the scale analyses indicated that the removal of the particular item would result in higher internal reliability. In the end, the problem-focused subscale used for analyses consisted of 18 items,  $\alpha = .85$  (e.g., “I try to come up with a strategy about what to do;” “I try to get advice from someone about what to do.”); the emotion-focused subscale 8 items,  $\alpha = .81$  (“I discuss my feelings with someone;” “I learn something from the experience”); and the avoidance subscale consisted of 8 items,  $\alpha = .85$  (“I pretend that it hasn’t really happened;” “I go to the movies or watch TV, to think about it less.”). The COPE has demonstrated good test-retest reliability at 8 weeks ( $r_s = .48$  to  $.77$ ; Carver et al., 1989) and one week ( $r_s = .74$ ,

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<sup>1</sup> For the purposes of this study, the *Turning to Religion* and *Destructive Behaviors* subscale items were assessed, but not included in the scale analysis, because the pilot study suggested that these subscales were not well-correlated with the other coping strategies.

.57, and .56; see Appendix A), suggesting that it adequately taps into a dispositional quality of coping (Carver et al., 1989). Lastly, the COPE has good construct validity predicting optimism, control, self-esteem, and anxiety, among other constructs, in expected directions (Carver et al., 1989).

**Perceptions of parents' coping behaviors.** Parents' modeled coping behaviors were assessed with a revised version of the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1985). The version created for this study included all the same items as the original Ways of Coping measure, however the instructions were revised to reflect young adults' perceptions of their parents' coping with everyday stress; participants rated how often they believe their mother and father used each of the provided coping strategies. The 66-item questionnaire instructed students to, "Think about your mother's experiences with *life stress*—for example, difficulty at work, an argument with your father, etc. Please read each item below and indicate, according to the below scale, to what extent you believe your mother has used each strategy throughout your life, including now, to deal with life stress." Participants then rated each strategy on a 4-point Likert-type scale with 1 being "not used" and 4 being "used a great deal." In the present study students completed two WCQ questionnaires-- one about their mothers' coping and another about their fathers'.

Factor analyses of the WCQ (Aldwin & Revenson, 1987; Folkman & Lazarus, 1985; Sorlie & Sexton, 2001; Tobin, Holroyd, Reynolds, & Wigal, 1989) have generally revealed eight subscales: problem-focused, wishful thinking, distancing, emphasizing the positive, self-blame, tension-reduction, self-isolation, social support (instrumental/emotional).

However, these eight subscales are not supported across all samples (Edwards & O'Neill, 1998). Often, the eight subscales have been collapsed into two higher order factors: problem-focused and emotion-focused (for review, see Skinner, Edge, Altman, & Sherwood, 2003). However, I believe that this dichotomy distorts the distinction between effective and less effective coping, especially in the emotion-focused factor (Tobin et al., 1989). Therefore, I utilized a three-factor structure to align not only with the goals of the current research, but also to ensure that each factor was theoretically distinct (Tobin et al., 1989). The same procedures described in the above section for the COPE were utilized here to determine the items within each factor. The three factors assessed for the current study were problem-focused (14 items;  $\alpha$ s = .85 & .85 for fathers and mothers, respectively; "She/He makes a plan of action and follows it;" "She gets professional help"), emotion-focused (11 items;  $\alpha$ s = .83 & .83 for fathers and mothers, respectively; "She/He changes or grows as a person in a good way;" "She/He talks to someone about how she/he is feeling."), and avoidance (26 items;  $\alpha$ s = .87 & .86 for fathers and mothers, respectively; "She/He doesn't let it get to her/him; refuses to think much about it.") and all subscales were derived via the same procedure outline above for the measure of participants' own coping.

Construct validity has been established with measures of depression and anxiety predicted in expected ways (Vitaliano, Russo, Carr, Maiuro, & Becker, 1985). Regarding reliability over time, Folkman and Lazarus (1985) believed that stability was in direct opposition to their theoretical orientation of coping; specifically, that coping was a transactional process. Therefore, test-retest data were not provided in their report of the

WCQ-R in the usual way. The authors did provide means at multiple time points and although some scales did show some significant change (e.g., social withdrawal), most scales showed only moderate change over three time points spanning 12 days. However, other researchers have found that test-retest reliability was acceptable over two weeks (*rs* ranged from .67 to .83; Tobin et al., 1989). Moreover, other researchers have found significant stability over longer periods of time (Bramsen, Bleikder, Triemstra, & Van Rossum, 1995; Hatton, Knussen, Sloper, & Turner, 1995), suggesting that there may in fact be intraindividual variability at the micro level, but that individuals likely have general tendencies towards certain coping behaviors over time. Data from my small pilot study (see Appendix A) provides additional support for temporal stability.

**Perceptions of parents' coping suggestions.** Parents' coping suggestions were measured using a modified version of the Parent Coping Socialization Scale-Revised (PCCSQ-R; Miller, 2000). The original form of this measure asks parents to rate how often they encourage or discourage particular coping strategies to their children. For the current study, I modified the original version of this questionnaire to assess young adults' perceptions of their parents' coping suggestions. Specifically, participants were instructed to, "Think about the different suggestions your mom (dad) gives you when you are dealing with an upsetting situation. For each of the suggestions below, please indicate how strongly you believe your mom (dad) suggests you use each of the strategies, with 1 indicating that she strongly DISCOURAGES that strategy and 7 indicating that she strongly ENCOURAGES that strategy."



Factor analyses of the PSCQ-R (Miller, Kliewer, Hepworth, & Sandler, 1994; Jones, Chow, Miller, Ayers, & Beard, 2006) differentiate 17 subscales: cognitive decision making, direct problem solving, seeking understanding, control, positivity, optimism, acceptance, problem-focused support and emotion-focused support, behavioral disengagement, cognitive disengagement, wishful thinking, distraction, and venting. Internal consistencies for the 17 subscales vary from .54 (venting) to .85 (cognitive decision making) (Miller et al., 1994). Test-retest reliability has been assessed over a period of 5 to 7 months in a sample of mothers and was found to be adequate with subscale correlations over time ranging from .24 (positivity) to .55 (emotion-focused support-seeking). The PSCQ-R has good construct validity with parents' self-reported coping behaviors predicting the kinds of suggestions they provide for their children as well as predicted by their own self-reported emotional expressiveness (Jones et al., 2006). For the purposes of the present study, I collapsed these 17 factors to assess the three coping strategies of interest using the procedure described above for participants' own coping. Intercorrelations amongst the subscales suggest this factor structure is reasonable (Miller et al., 2006), and thus the subscales for the current study include an 18-item problem-focused scale ( $\alpha$ s = .93 and .92 for fathers and mothers, respectively; "He/She tells me to tell myself that I can handle the problem;" "He/She tells me to tell him/her how I would like to solve the problem."), a 17-item emotion-focused scale ( $\alpha$ s = .89 and .89 for fathers and mothers, respectively; "He/She tells me to tell myself that things will get better;" "He/She tells me to tell my friends about what makes me feel the way I do."), and a 24-item avoidance scale ( $\alpha$ s = .90 and .90 for fathers and mothers, respectively; "He/She tells me to try to stay away from things that make me feel upset.").

**Young adults' schemas about parents.** Participants' schemas about their relationship with their parents were assessed via participants' five-minute open-ended audiotaped narratives about their mothers and fathers. Each participant was asked to respond out loud to the following prompt which was read verbatim by the experimenter, answering once about their mother and then again about their father: "I'd like to hear your thoughts and feelings about your mother/father, in your own words and without my interrupting with any questions or comments. When I ask you to begin I'd like you to speak for 5 minutes, telling me what kind of a person your mother/father is and how the two of you get along together. After you begin to speak, I prefer not to answer any questions until after the 5 minutes. Do you have any questions?" In accordance with the protocol for the Five-Minute Speech Sample (FMSS; Bullock, Schneiger, & Dishion, 2005; Magana et al, 1986), participants were not given any further instructions. If participants asked questions, they were simply re-read the initial prompt. Participants' five minutes were timed once they began their response. Exclusion criteria were set such that participants would be excluded if they were silent for 30 consecutive seconds and continued their silence after prompted for additional information. However, there were no speech samples that met these criteria.

The audiotaped five-minute speech samples were then transcribed and later coded by two trained RAs for two qualities of the parent-child relationship: (1) criticism and (2) warmth, using the Family Affective Attitude Rating Scale (FAARS; Bullock et al., 2005; see Appendix B). This coding system was created to assess the attitudes and attributions that a person has about another "target individual;" in this case, the participant's mother and father.

The FAARS is a “macro-social coding system” such that coders are trained to provide global ratings of each participant’s response (separately for mothers and fathers) to include both content and tone of the entire narrative. For the current study, participants were trained using FMSS narratives from an earlier pilot study that provided 100 schemas (50 mother, 50 father). RAs were first trained by the author by first coding 20 narratives (10 mother, 10 father) and then meeting to discuss discrepancies and to address any issues of clarity in the coding criteria. This procedure was completed three additional times until acceptable reliability was met (ICC +/- = .90). In total, training took approximately 15 hours over 60 FMSS narratives. See Appendix B for participant protocol as well as more specific information relevant to the coding procedures.

The FAARS coding results in two dimensions of participants’ schemas about their mother and father, separately: *criticism* and *warmth*. *Criticism* consists of six subcategories including “critical remarks regarding the *behavior* of the mother/father” ( $\alpha = .75$ ; Bullock et al., 2005). *Warmth* consists of six subcategories including “reports positive relationship with mother/father” ( $\alpha = .68$ ; Bullock et al., 2005). Each subcategory is rated on a 9-point Likert-type scale. Two RAs were trained to code the relationship narratives using the 12 categories of the FAARS coding system. Coder reliability was achieved, with acceptable interrater reliability for both conflict and warmth subscales (ICC +/- 1 = .91 and .87, respectively). A small pilot study was conducted prior to the start of the current study to determine the short-term test-retest reliability of this measure to ensure that it actually assesses a relatively stable construct. Results of this one-week test-retest assessment indicated relatively strong

associations across time for both young adults' schemas of their mothers ( $r_s = .51$  and  $.60$  for criticism and warmth dimensions, respectively) and fathers ( $r_s = .88$  and  $.63$  for criticism and warmth dimensions, respectively).

In order to be parsimonious, and to increase the interpretability of results emerging from the parental schema variables, one continuous variable was computed from the two schema dimensions (i.e., criticism and warmth). Given the moderate correlations between the warmth and criticism scales for participants' schemas about their mothers ( $r = -.56, p < .001$ ) and their fathers ( $r = -.60, p < .001$ ), this strategy was reasonable. Specifically, each participant's criticism variable was subtracted from his or her warmth variable, resulting in a variable with a possible range of  $-9.0$  to  $9.0$ . Correlations between the new composite variables and the separate criticism and warmth subscales for both mother and father schemas were large, further supporting the decision to consolidate the variables ( $r_s = .95$  and  $-.80$  for warmth and criticism, respectively) and fathers ( $r_s = .95$  and  $-.82$  for warmth and criticism, respectively).

## **Results**

### **Preliminary Analyses**

Descriptive statistics are presented in Table 2, followed by analyses evaluating the linkages between all the variables in the hypothesized model (see Figure 1). Because the original coping socialization model (Kliewer et al., 1994; 1996) suggested there may be gender and family structure (i.e., nuclear v. non-nuclear families) differences for some of the study variables, Multivariate Analysis of Variance (MANOVAs) were conducted for gender

and family structure separately. The only gender difference found among the 17 coping and schema variables was for young adults' emotion-focused coping,  $F(1, 230) = 27.84, p < .001$ , with young adult females ( $M(SD) = 3.04 (.56)$ ) reporting more emotion-focused coping than male young adults ( $M(SD) = 2.66 (.52)$ ). Family structure differences were found for young adults' perceptions of their fathers, including fathers' problem- ( $M(SD) = 2.64 (.04)$  and  $2.34 (.08)$  for nuclear and divorced families, respectively) and emotion-focused coping ( $M(SD) = 2.37 (.04)$  and  $2.09 (.08)$  for nuclear and divorced families, respectively), problem-focused ( $M(SD) = 4.98 (.08)$  and  $4.49 (.15)$  for nuclear and divorced families, respectively), emotion-focused ( $M(SD) = 4.57 (.08)$  and  $3.99 (.16)$  for nuclear and divorced families, respectively), and avoidance ( $M(SD) = 3.30 (.07)$  and  $2.98 (.14)$  for nuclear and divorced families, respectively) coping suggestions and young adults' overall schemas of their fathers ( $M(SD) = 3.19 (.19)$  and  $1.40 (.37)$  for nuclear and divorced families, respectively). In these cases, means were lower for young adults from non-nuclear families than for young adults from nuclear families. However, when family structure was included in the regression models, the results were not impacted, and so family structure was not included in any of the presented results. Correlation analyses determined that no other demographic variables (i.e., age, months away from home) were associated significantly with any of the variables in the hypothesized model.

### **Correlations among Predictor Variables**

Correlations among the predictor variables are provided in Table 3. Overall, young adults' perceptions of their mothers' and fathers' coping behaviors were moderately correlated, with the exception of avoidance, which was generally not related to the other

parent coping variables. Young adults' perceptions of their parents' coping suggestions, however, were moderately correlated, indicating perhaps that when parents suggest strategies for coping, they suggest many kinds of strategies. Of note is that young adults' perceptions of their parents' coping behaviors and suggestions were moderately related, but in expected ways. Although the correlations between these two measures were significantly related, they were also not so related as to assume that they are assessing the same construct. For young adults' schemas of their parents, schemas about mothers were most closely related to young adults' perceptions of mothers' problem-focused and emotion-focused behaviors and suggestions. Young adults' schemas of fathers were generally only related to their perceptions of fathers' emotion-focused behaviors and suggestions. Young adults' schemas of their mothers and fathers were only slightly related.

### **Correlations among Outcome Variables**

Correlations among young adults' self-reported coping strategies were also conducted. Young adults' problem-focused and emotion-focused coping were moderately correlated,  $r(231) = .55, p < .001$ . Young adults' avoidance coping, on the other hand, was less related to their problem-focused ( $z = 8.09, p < .001$ ) and emotion-focused coping ( $z = 8.64, p < .001$ ) strategies, ( $r_s(231) = -.14$  and  $-.17, p_s = .04$  and  $.01$ , respectively).

### **Associations among Components in the Hypothesized Model**

Due to the complexity of the hypothesized model, SEM or path analyses would have required upwards of 800 participants; therefore all hypotheses are tested via regression analyses. Given the methodology used for the current study, young adults' perceptions of

their mothers and fathers are not independent; thus, all analyses were conducted separately for young adults' perceptions of their mothers and fathers for each aim.

Table 2

*Descriptive Information for Measures Used*

	Mean (SD)	Min	Max	Alpha
<b>Predictors</b>				
Perceptions of mothers' coping				
Problem-focused	2.61 (0.50)	1.14	3.79	.854
Emotion-focused	2.52 (0.54)	1.00	3.91	.826
Avoidance	1.71 (0.36)	1.00	2.77	.859
Perceptions of fathers' coping				
Problem-focused	2.59 (0.51)	1.00	3.86	.848
Emotion-focused	2.32 (0.51)	1.00	3.82	.828
Avoidance	1.94 (0.41)	1.00	3.38	.870
Perceptions of mothers' coping suggestions				
Problem-focused	5.00 (0.94)	1.00	7.00	.923
Emotion-focused	4.83 (1.01)	1.35	7.00	.885
Avoidance	3.36 (0.89)	1.00	6.67	.902
Perceptions of fathers' coping suggestions				
Problem-focused	4.93 (1.00)	1.22	7.00	.932
Emotion-focused	4.46 (1.04)	1.24	7.00	.889
Avoidance	3.23 (0.86)	1.00	7.00	.897
Relationship schema				
Mother	3.12 (2.16)	-5.17	6.83	N/A
Father	2.81 (2.45)	-4.50	6.67	N/A
<b>Outcomes</b>				
Young adults' coping				
Problem-focused	2.76 (0.43)	1.67	3.94	.852
Emotion-focused	2.87 (0.57)	1.63	4.00	.813
Avoidance	1.56 (0.52)	1.00	3.25	.845



*Correlations among Predictor Variables*

	Perceptions of Parents' Coping						Perceptions of Parents' Coping Suggestions						Sch
	1	2	3	4	5	6	7	8	9	10	11	12	
Perceptions of Coping													
Others' problem-focused	--												
Others' emotion-focused	.67**	--											
Others' avoidance	.05	.21**	--										
Others' problem-focused	.26**	.22**	.06	--									
Others' emotion-focused	.27**	.29**	.09	.56**	--								
Others' avoidance	.11	.13*	.48**	-.04	.16*	--							
Perceptions of Suggestions													
Others' problem-focused	.52**	.38**	-.05	.25**	.25**	-.01	--						
Others' emotion-focused	.40**	.47**	.10	.15*	.22**	.07	.74**	--					
Others' avoidance	.11	.15*	.35**	.07	.06	.18**	.40**	.44**	--				
Others' problem-focused	.22**	.10	-.06	.55**	.37**	-.09	.51**	.30**	.22**	--			
Others' emotion-focused	.22**	.19**	.07	.36**	.49**	.09	.46**	.56**	.28**	.70**	--		
Others' avoidance	.09	.08	.27	.10	.14*	.30**	.19**	.24**	.60**	.35**	.48**	--	
Other													
Other	.29**	.34**	-.08	.06	.17*	-.01	.39**	.36**	.09	.11	.19**	.04	
Other	.11	.19**	.02	.34**	.36**	-.08	.13*	.26**	.10	.27**	.39**	.09	

\* $p < .025$ , \*\*  $p < .01$

**Aim 1. The first aim was to determine the relation between parents' modeled coping behaviors and young adults' coping behaviors (1a) and whether these relations would vary by parent and child gender (1b).**

To examine if there were associations between parents' coping behaviors and the coping behaviors of young adults' and also if these associations varied as a function of gender, a series of hierarchical regressions were conducted. Separate models were conducted for perceptions of mothers and fathers for each DV (i.e., young adults' problem-focused, emotion-focused, and avoidance coping). These models included gender (dummy coded, 0 = male, 1 = female) in step 1 and the parent coping behaviors in step 2. Then, the interaction term (parent coping strategy of interest X young adult gender) was entered in step 3. To reduce multicollinearity, all IVs were centered (Aiken & West, 1991). The interaction terms were created as products of the centered predictor variables. Significant interactions were decomposed using the online program, ModGraph (Jose, 2008), which provides information regarding the significance of simple slopes. Finally, because of the large number of regressions necessary to fully explicate the goals of this particular aim, specifically 18, only tests that met a *p*-value of .025 or less were considered.

As can be seen in Tables 4 and 5, five of the six direct relations between young adults' perceptions of their parents' coping behaviors and their own self-reported coping strategies were significant in hypothesized ways with perceptions of both mothers' and fathers' coping behaviors being most predictive of the parallel coping strategy of young

adults. The one exception was for perceptions of mothers' emotion-focused coping, which was not a significant predictor of young adults' emotion-focused coping; rather, mothers' problem-focused coping was predictive of young adults' emotion-focused strategies. Regarding the hypothesized interactions, none of the regression models predicting young adults' problem-focused or emotion-focused coping indicated significant moderating effects of participant gender. For the regressions predicting young adults' avoidance coping, however, both parent models testing the association between parents' avoidance coping and young adults' avoidance coping revealed a significant influence of gender, and in very similar ways. Specifically, follow-up simple slopes tests for the mother model showed that the association between mothers' avoidance coping and the avoidance coping of young adults was significant for both male and female participants ( $bs = .89$  and  $.49$ , respectively), but the slope was steeper for male participants than for female participants,  $z = 6.72$ ,  $p < .001$ ; see Figure 2. Similarly, fathers' avoidance coping was also significantly predictive of both male and female participants avoidance coping ( $bs = .73$  and  $.38$ , respectively), but again, the slope was significantly steeper for males than females,  $z = 3.95$ ,  $p < .001$ ; see Figure 3.

4.

*hierarchical Regression Analyses Testing the Associations between Mothers' Coping Behaviors and Young Adults' Coping Behaviors: Moderating Influence of Gender*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	<i>SE</i>	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	<i>SE</i>	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	<i>SE</i>	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
<i>df</i> = (1, 229)															
er	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
<i>df</i> = (4, 226)				.13	11.31***				.07	6.83***				.26	26.73
er Problem-focused	.33	.07	.39***			.25	.09	.22**			-.11	.08	-.11		
er Emotion-focused	-.05	.07	-.07			.08	.09	.08			.02	.08	.02		
er Avoidance	.12	.07	.11			-.06	.09	-.04			.68	.08	.50***		
<i>df</i> = (5, 225)															
er Problem-focused*	-.09	.11	-.08	.00	.69	-.13	.14	-.09	.00	.78	.14	.12	.10	.00	1.27
er Emotion-focused*	-.23	.11	-.24	.02	4.75†	-.19	.14	-.15	.01	1.90	.10	.12	.09	.00	.78
er Avoidance*	-.12	.14	-.08	.00	.74	-.19	.18	-.09	.00	1.10	-.40	.15	-.22	.02	7.07

05, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 9 independent analyses.

5.

*hierarchical Regression Analyses Testing the Associations between Fathers' Coping Behaviors and Young Adults' Coping Behaviors: The Moderating Influence of Gender*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
Step 1: <i>df</i> = (1, 229)															
Step 2: <i>df</i> = (4, 226)	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
Step 3: <i>df</i> = (5, 225)				.11	9.33***				.05	4.60*				.20	18.58
Step 4: <i>df</i> = (6, 224)	.24	.06	.29***			.03	.08	.02			-.11	.07	-.10		
Step 5: <i>df</i> = (7, 223)	.03	.06	.04			.23	.08	.21**			.01	.07	.01		
Step 6: <i>df</i> = (8, 222)	.13	.07	.12			.05	.09	.04			.54	.08	.43***		
Step 7: <i>df</i> = (9, 221)															
Step 8: <i>df</i> = (10, 220)															
Step 9: <i>df</i> = (11, 219)															
Step 10: <i>df</i> = (12, 218)															
Step 11: <i>df</i> = (13, 217)															
Step 12: <i>df</i> = (14, 216)															
Step 13: <i>df</i> = (15, 215)															
Step 14: <i>df</i> = (16, 214)															
Step 15: <i>df</i> = (17, 213)															
Step 16: <i>df</i> = (18, 212)															
Step 17: <i>df</i> = (19, 211)															
Step 18: <i>df</i> = (20, 210)															
Step 19: <i>df</i> = (21, 209)															
Step 20: <i>df</i> = (22, 208)															
Step 21: <i>df</i> = (23, 207)															
Step 22: <i>df</i> = (24, 206)															
Step 23: <i>df</i> = (25, 205)															
Step 24: <i>df</i> = (26, 204)															
Step 25: <i>df</i> = (27, 203)															
Step 26: <i>df</i> = (28, 202)															
Step 27: <i>df</i> = (29, 201)															
Step 28: <i>df</i> = (30, 200)															
Step 29: <i>df</i> = (31, 199)															
Step 30: <i>df</i> = (32, 198)															
Step 31: <i>df</i> = (33, 197)															
Step 32: <i>df</i> = (34, 196)															
Step 33: <i>df</i> = (35, 195)															
Step 34: <i>df</i> = (36, 194)															
Step 35: <i>df</i> = (37, 193)															
Step 36: <i>df</i> = (38, 192)															
Step 37: <i>df</i> = (39, 191)															
Step 38: <i>df</i> = (40, 190)															
Step 39: <i>df</i> = (41, 189)															
Step 40: <i>df</i> = (42, 188)															
Step 41: <i>df</i> = (43, 187)															
Step 42: <i>df</i> = (44, 186)															
Step 43: <i>df</i> = (45, 185)															
Step 44: <i>df</i> = (46, 184)															
Step 45: <i>df</i> = (47, 183)															
Step 46: <i>df</i> = (48, 182)															
Step 47: <i>df</i> = (49, 181)															
Step 48: <i>df</i> = (50, 180)															
Step 49: <i>df</i> = (51, 179)															
Step 50: <i>df</i> = (52, 178)															
Step 51: <i>df</i> = (53, 177)															
Step 52: <i>df</i> = (54, 176)															
Step 53: <i>df</i> = (55, 175)															
Step 54: <i>df</i> = (56, 174)															
Step 55: <i>df</i> = (57, 173)															
Step 56: <i>df</i> = (58, 172)															
Step 57: <i>df</i> = (59, 171)															
Step 58: <i>df</i> = (60, 170)															
Step 59: <i>df</i> = (61, 169)															
Step 60: <i>df</i> = (62, 168)															
Step 61: <i>df</i> = (63, 167)															
Step 62: <i>df</i> = (64, 166)															
Step 63: <i>df</i> = (65, 165)															
Step 64: <i>df</i> = (66, 164)															
Step 65: <i>df</i> = (67, 163)															
Step 66: <i>df</i> = (68, 162)															
Step 67: <i>df</i> = (69, 161)															
Step 68: <i>df</i> = (70, 160)															
Step 69: <i>df</i> = (71, 159)															
Step 70: <i>df</i> = (72, 158)															
Step 71: <i>df</i> = (73, 157)															
Step 72: <i>df</i> = (74, 156)															
Step 73: <i>df</i> = (75, 155)															
Step 74: <i>df</i> = (76, 154)															
Step 75: <i>df</i> = (77, 153)															
Step 76: <i>df</i> = (78, 152)															
Step 77: <i>df</i> = (79, 151)															
Step 78: <i>df</i> = (80, 150)															
Step 79: <i>df</i> = (81, 149)															
Step 80: <i>df</i> = (82, 148)															
Step 81: <i>df</i> = (83, 147)															
Step 82: <i>df</i> = (84, 146)															
Step 83: <i>df</i> = (85, 145)															
Step 84: <i>df</i> = (86, 144)															
Step 85: <i>df</i> = (87, 143)															
Step 86: <i>df</i> = (88, 142)															
Step 87: <i>df</i> = (89, 141)															
Step 88: <i>df</i> = (90, 140)															
Step 89: <i>df</i> = (91, 139)															
Step 90: <i>df</i> = (92, 138)															
Step 91: <i>df</i> = (93, 137)															
Step 92: <i>df</i> = (94, 136)															
Step 93: <i>df</i> = (95, 135)															
Step 94: <i>df</i> = (96, 134)															
Step 95: <i>df</i> = (97, 133)															
Step 96: <i>df</i> = (98, 132)															
Step 97: <i>df</i> = (99, 131)															
Step 98: <i>df</i> = (100, 130)															
Step 99: <i>df</i> = (101, 129)															
Step 100: <i>df</i> = (102, 128)															

5, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 90 identical analyses.

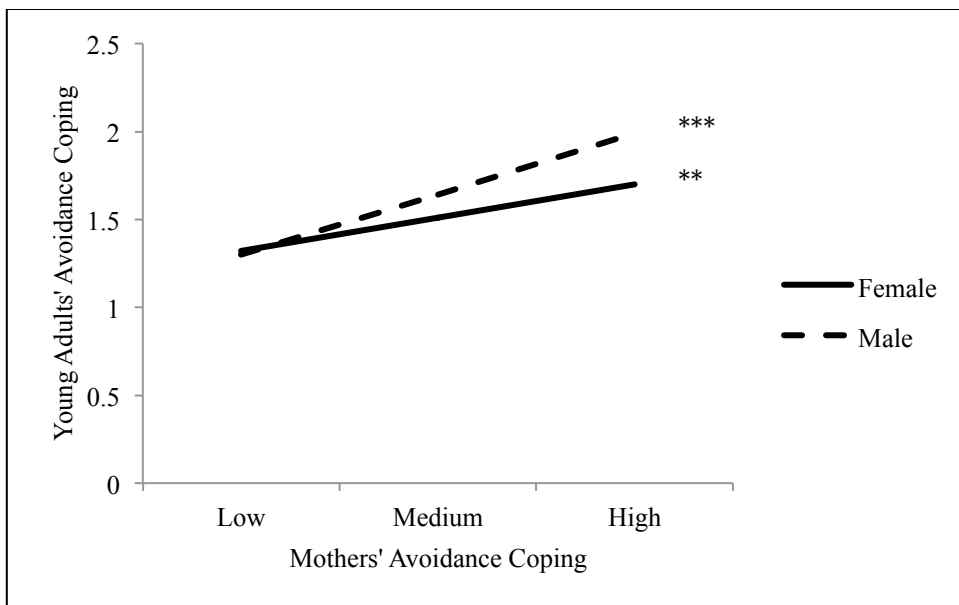


Figure 2. Gender moderates the association between young adults' perceptions of mothers' avoidance coping and young adults' avoidance coping.

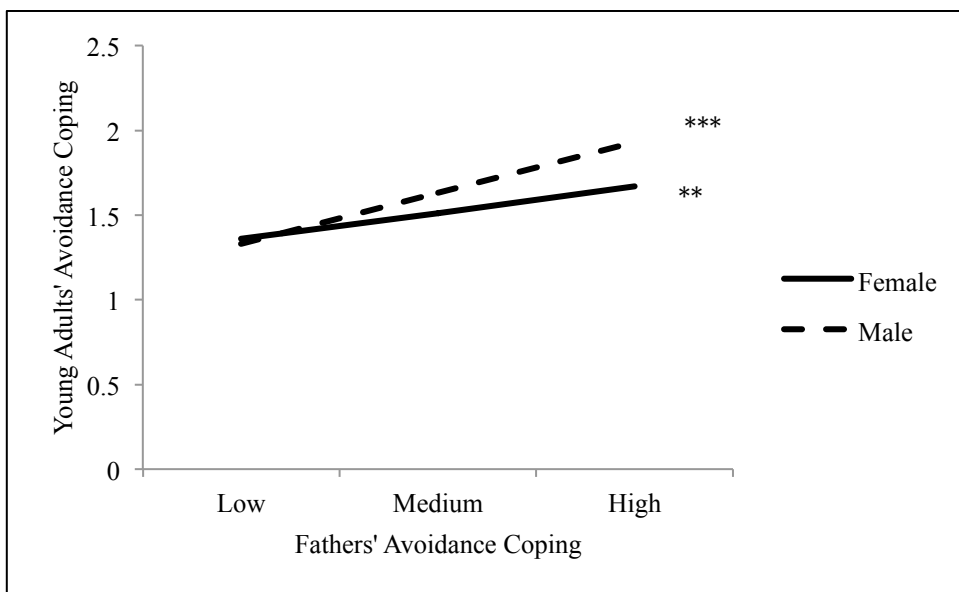


Figure 3. Gender moderates the association between young adults' perceptions of fathers' avoidance coping and young adults' avoidance coping.

**Aim 2. The second aim was to determine the relation between perceptions of parents' explicit coping suggestions and young adults' coping behaviors (2a) and whether these relations would vary by parent and child gender (2b).**

To examine the associations between parents' coping suggestions and the coping behaviors of young adults' and whether these associations varied as a function of gender, a series of hierarchical regressions were conducted. Specifically, these models included the gender (dummy coded, 0 = male, 1 = female) entered in step 1, followed by parents' coping suggestions entered in step 2. Then, the interaction term (parent coping suggestion of interest X young adult gender) was entered in step 3. To reduce multicollinearity, all IVs were centered (Aiken & West, 1991). The interaction terms were created as products of the centered predictor variables. Significant interactions were decomposed using the statistical program, ModGraph (Jose, 2008), which provides information regarding the significance of simple slopes. Finally, because of the large number of regressions necessary to fully explicate the goals of this particular aim, specifically 18, only tests that met a p-value of .025 or less were considered.

As can be seen in Tables 6 and 7, young adults' perceptions of their parents' coping suggestions were mostly predictive of young adults' self-reported coping strategies in hypothesized ways, with the exception of young adults' emotion-focused coping that was only associated with mothers' emotion-focused coping suggestions at trend-level. However, in addition to the hypothesized associations of parents' coping suggestions predicting parallel coping strategies for young adults, in a number of instances parents' non-parallel coping

suggestions were also predictive of young adults' coping behaviors. For example, young adults' avoidance coping is positively associated with both mothers' and fathers' coping avoidance suggestions, but is also negative associated with parents' problem-solving suggestions. Fathers suggestions in particular were found to be more frequently associated with young adults' coping behaviors, both parallel and non-parallel, than the coping suggestions of mothers.

Regarding the hypothesized interactions, none of the regression models predicting young adults' problem-focused or emotion-focused coping indicated significant moderating effects of participant gender. For the regressions predicting young adults' avoidance coping, however, both parent models testing the association between parents' avoidance suggestions and young adults' avoidance coping revealed a significant influence of gender, and in very similar ways; please see Table 9. Specifically, follow-up simple slopes tests for the mother model showed that the association between mothers' avoidance suggestions and young adults' avoidance coping was significant only for the female young adults ( $bs = .52, p < .001$ ); see Figure 4. Fathers' avoidance coping, on the other hand, was significantly predictive of both male and female participants ( $bs = .24$  and  $.52$ , respectively), but the slope was significantly steeper females than males,  $z = 2.5, p = .01$ ; see Figure 5.



*Hierarchical Regression Analyses Testing the Associations between Mothers' Coping Suggestions and Young Adults' Coping Behaviors: Moderating Influence of Gender*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
<i>df</i> = (1, 229)															
or	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
<i>df</i> = (4, 226)				.08	6.90***				.09	8.45***				.16	14.00
or Problem-focused suggestions	.12	.04	.28**			.11	.05	.17			-.28	.05	-.41***		
or Emotion-focused suggestions	.03	.04	.06			.11	.05	.18†			.04	.05	.09		
or Avoidance suggestions	-.06	.04	-.12			-.07	.04	-.11			.20	.04	.35***		
<i>df</i> = (5, 225)															
or Problem-focused suggestions*Gender	.16	.08	.14	.02	4.30†	.11	.10	.07	.01	1.28	.13	.09	.10	.01	2.27
or Emotion-focused suggestions*Gender	.00	.07	.00	.00	.00	.02	.09	.01	.00	.05	.16	.08	.14	.02	4.05
or Avoidance suggestions*Gender	.09	.11	.06	.00	.65	-.14	.14	-.06	.00	.98	.36	.13	.18	.03	8.03

.05, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 9 independent analyses.

*hierarchical Regression Analyses Testing the Association between Fathers' Coping Suggestions and Young Adults Coping Behaviors*

*Moderating Influence of Gender*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
<i>df</i> = (1, 229)															
er	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.86
<i>df</i> = (4, 226)				.07	5.37***				.07	6.42***				.22	20.89
r Problem-focused suggestions	.09	.04	.21*			.05	.05	.08			-.21	.04	-.41***		
r Emotion-focused suggestions	.04	.04	.09			.13	.05	.23*			.02	.05	.04		
r Avoidance suggestions	-.08	.04	-.17*			-.14	.05	-.21**			.26	.04	.42***		
<i>df</i> = (5, 225)															
r Problem-focused suggestions*Gender	.11	.08	.10	.01	2.04	.02	.09	.02	.00	.06	.12	.08	.09	.01	2.12
r Emotion-focused suggestions*Gender	.15	.08	.15	.02	4.12†	.14	.10	.10	.01	2.01	.12	.08	.09	.01	1.87
r Avoidance suggestions*Gender	.09	.09	.06	.00	.84	.04	.12	.02	.00	.14	.24	.10	.14	.02	5.29

†5, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 9 identical analyses.

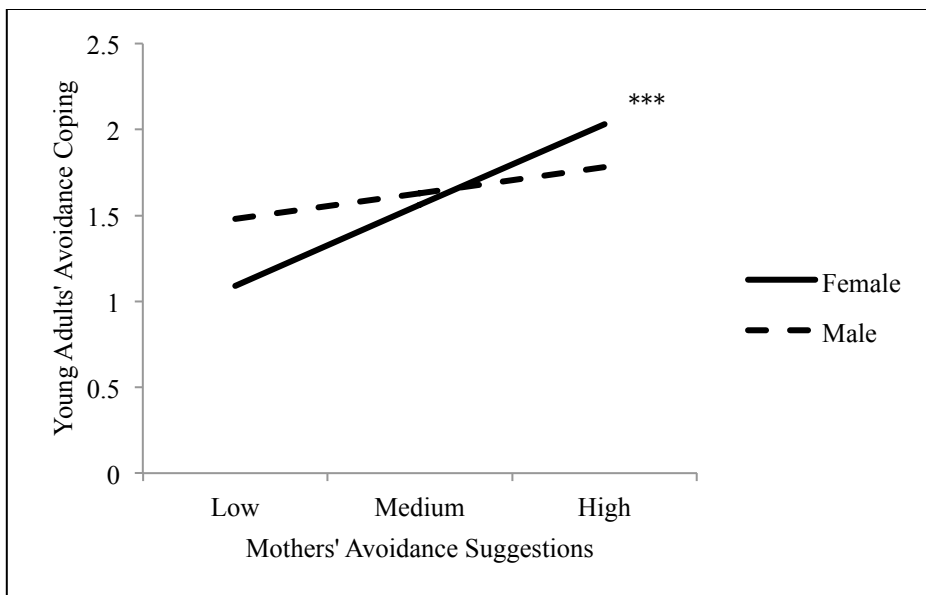


Figure 4. Gender moderates the association between young adults' perceptions of mothers' avoidance suggestions and young adults' avoidance coping.

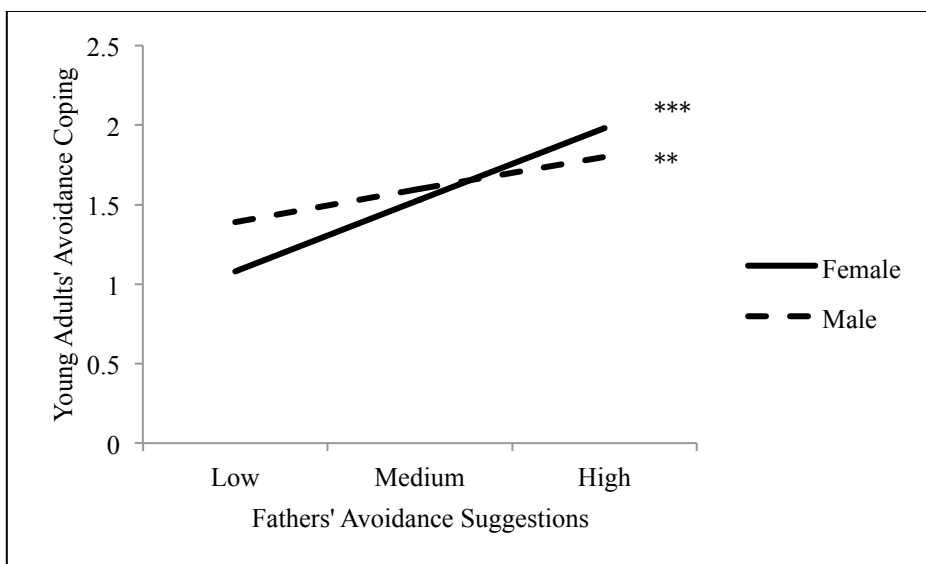


Figure 5. Gender moderates the association between young adults' perceptions of fathers' avoidance suggestions and young adults' avoidance coping.

**Aim 3. The third aim was to determine the relation between young adults' schemas of their parents and their direct effects on young adults' coping behaviors (3a) and whether these relations would vary by parent and child gender (3b).**

A series of hierarchical regressions were conducted to test the associations between young adults' schemas about their parents and their coping behaviors as well as whether these associations would vary by gender. To fully explicate this question, a series of six hierarchical regressions were conducted, three models measuring the association between young adults' schemas about their mothers predicting their coping behaviors, and three for fathers'. Specifically, these models included gender (dummy coded, 0 = male, 1 = female) entered in step 1, followed by young adults' schemas (i.e., schema about mother and schema about father) entered in step 2. Then, the interaction term (parent schema X young adult gender) was entered in step 3. To reduce multicollinearity, the parent schemas were centered (Aiken & West, 1991). The interaction terms were created as products of the centered predictor variables.

As can be seen in Table 8, there were no significant relations between young adults' schemas about their parents and their own self-reported coping. Further, contrary to predictions, gender was not a significant moderator for any of the models measuring the relationship between young adults' parent schemas and young adults' coping behaviors.

ble 8.

*erarchical Regression Analyses Testing the Association between Young Adults' Schemas about their Parents and their own  
ping Behaviors and the Moderating Influence of Gender*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
ep 1: <i>df</i> = (1, 229)															
gender	.03	.06	.04	.00	.32	.35	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
ep 2: <i>df</i> = (3, 227)				.00	.45				.03	4.44*				.00	.38
father Schema	.01	.01	.05			.04	.02	.15†			-.01	.02	-.05		
mother Schema	.00	.01	.03			.02	.02	.10			.01	.01	.03		
ep 3: <i>df</i> = (4, 226)															
father Schema*	.05	.03	.19	.01	2.58	.02	.04	.05	.00	.19	-.02	.03	-.08	.00	.43
gender															
mother Schema*	.02	.02	.11	.00	.95	.02	.03	.07	.00	.43	-.04	.03	-.13	.01	1.39
gender															

< .05, \* *p* < .025, \*\* *p* < .01, \*\*\* *p* < .001

note: Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 6 dependent analyses.

**Aim 4. The fourth aim was to determine whether young adults' schemas of parents would moderate the relations between parents' modeled behavior (4a) and coaching of children's stress management (4b) on young adults' coping behaviors.**

A series of hierarchical regressions were conducted to test the question of whether or not the associations between young adults' coping behaviors and their perceptions of their parents' coping behaviors and suggestions would vary by young adults' schemas about their parents. Specifically, these models included the covariate of gender (dummy coded; 0 = male, 1 = female) entered in step 1, followed by the respective parent schema (e.g., schema of mother) entered in step 2 and then the respective parent coping variables (e.g., mothers' coping behaviors) entered in step 3. Then, the interaction term (parent coping behavior or suggestion X parent schema) was entered in step 4. To reduce multicollinearity, all IVs were centered (Aiken & West, 1991). The interaction terms were created as products of the centered predictor variables. Significant interactions were probed by calculating and plotting simple slopes at  $\pm SD$  from the mean of the moderator (Aiken & West, 1991) and the region of significance for simple slopes was calculated using the computational tools provided online by Paul Jose (2008). Finally, because of the large number of regressions necessary to fully explicate the goals of this particular aim, specifically 18 for parents' coping behaviors and 18 for parents' coping suggestions, only tests that met a  $p$ -value of .025 or less were considered.

Beginning with the 18 models testing the influence of young adults' parent schemas on the association between their perceptions of their parents' coping behaviors and their own

coping behaviors, only four models were significant, see Tables 9 and 10 for statistical information for all 18 models.

*hical Regression Analyses Testing the Association between Mothers' Coping Behaviors and the Coping Behaviors of Young Adults and the Moderating Influence of Young Adults' Schemas about their Mothers.*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
<i>df</i> = (1, 229)															
er	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
<i>df</i> = (2, 228)															
er schema	.01	.01	.06	.00	.75	.04	.02	.15	.02	6.21*	-.01	.02	-.05	.00	.52
<i>df</i> = (5, 225)				.13	11.03***				.06	5.09**				.26	26.43
er Problem-focused	.33	.07	.39***			.24	.09	.21**			-.11	.08	-.11		
er Emotion-focused	-.05	.07	-.06			.06	.09	.06			.02	.08	.02		
er Avoidance	.12	.07	.11			-.04	.09	-.03			.68	.08	.51***		
<i>df</i> = (6, 224)															
er Problem-focused*															
er schema	.05	.02	.17	.02	6.03*	.03	.03	.06	.00	.79	-.01	.03	-.02	.00	.14
er Emotion-focused*															
er schema	.06	.02	.19	.03	7.79**	.02	.03	.05	.00	.57	.02	.02	.05	.00	.6
er Avoidance*															
er schema	.02	.04	.04	.00	.46	-.03	.05	-.03	.00	.30	.06	.04	.09	.01	2.3

15, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 9 identical analyses.



*hierarchical Regression Analyses Testing the Association between Fathers' Coping Behaviors and the Coping Behaviors of Young Adults and the Moderating Influence of Young Adults' Schemas about their Fathers.*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
<i>df</i> = (1, 229)															
er	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
<i>df</i> = (2, 228)															
r schema	.00	.01	.03	.00	.26	.03	.02	.12	.02	3.91†	.01	.01	.03	.00	.14
<i>df</i> = (3, 227)															
r Problem-focused	.25	.07	.30***	.11	9.71***	.02	.09	.01	.04	3.44*	-.12	.07	-.12	.21	19.52
r Emotion-focused	.05	.07	.06			.21	.09	.19*			-.02	.08	-.02		
r Avoidance	.12	.07	.12			.06	.09	.04			.55	.08	.44***		
<i>df</i> = (6, 224)															
r Problem-focused*															
r schema	.05	.02	.18	.03	7.99**	.09	.03	.22	.05	12.80***	-.02	.02	-.06	.00	.9
r Emotion-focused*															
r schema	.01	.02	.04	.00	.30	.04	.03	.10	.01	2.49	-.01	.02	-.01	.00	.4
r Avoidance*Father															
na	.02	.03	.04	.00	.46	-.02	.03	-.03	.00	.29	.03	.03	.07	.00	1.1

.05, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 9 independent analyses.

First, for young adults' problem-focused coping, there was a significant interaction between young adults' schemas of their mothers and their perceptions of their mothers' problem-focused coping. As illustrated in Figure 6, when young adults have more positive schemas of their mothers, the association between their perceptions of their mothers' problem-focused coping and their own problem-focused was stronger ( $b = .45, p < .001$ ) than when young adults have less positive schemas of their mothers ( $b = .21, p = .003$ ),  $z = 2.89, p < .01$ .

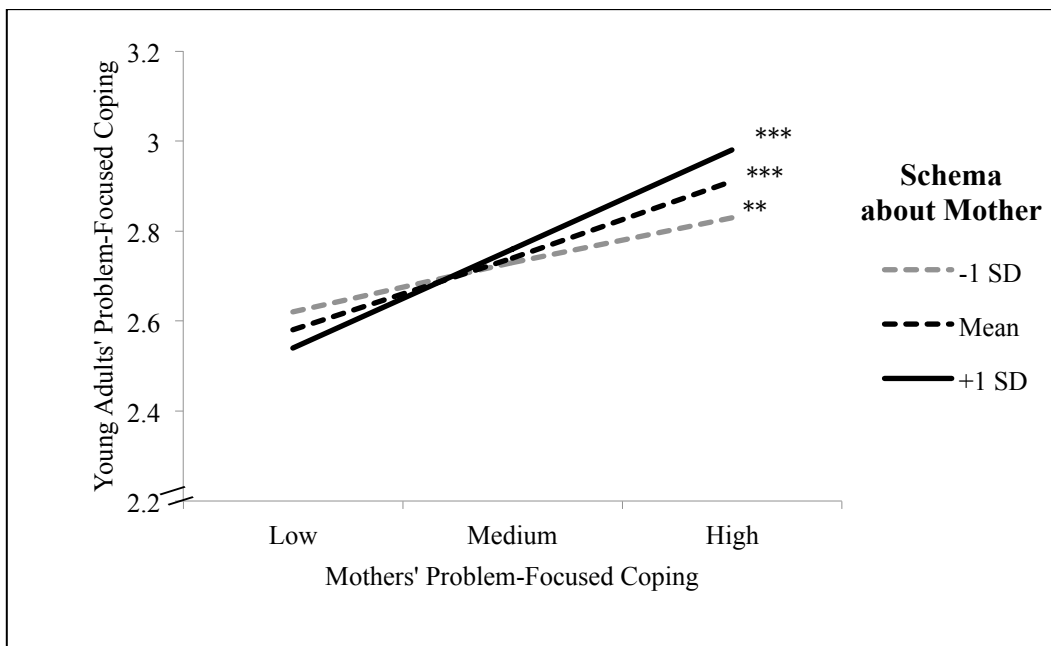


Figure 6. Young adults' schemas about mothers moderate the association between young adults' perception of mothers' problem-focused coping and young adults' problem-focused coping.

A similar pattern was found for young adults' perceptions of their fathers' problem-focused coping predicting their own problem-focused coping, with more positive schemas ( $b = .41, p = .004$ ) being related to stronger associations between fathers' problem-focused coping and the problem-focused coping of young adults than less positive schemas ( $b = .28, p = .02$ ),  $z = 1.58, p = .05$ .

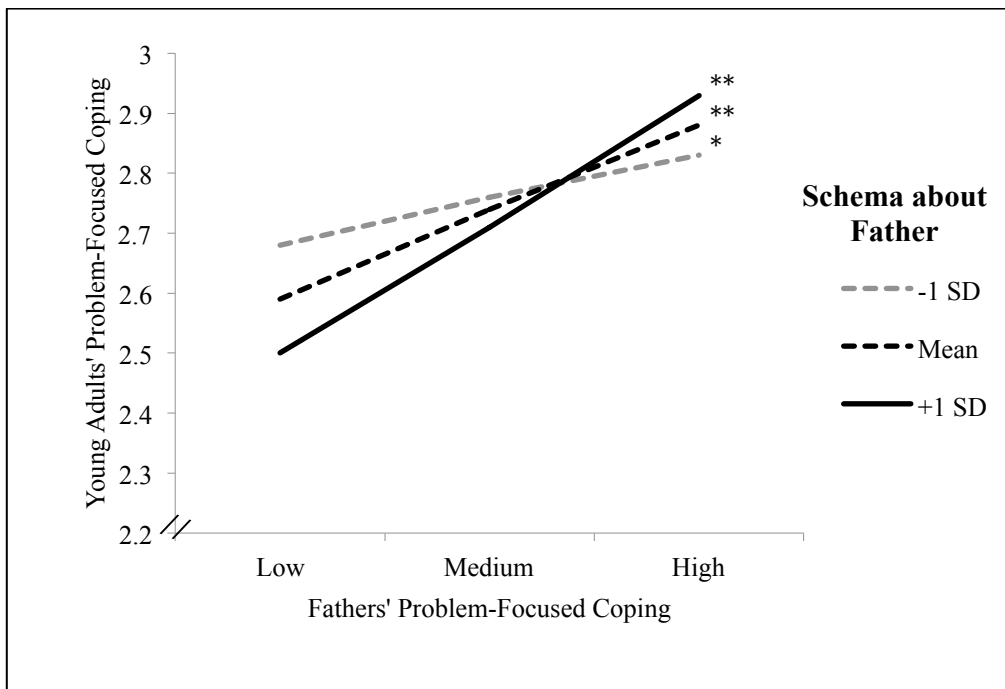


Figure 7. Young adults' schemas about fathers moderate the association between young adults' perception of fathers' problem-focused coping and young adults' problem-focused coping.

Young adults' schemas of their mothers had a particularly strong effect on the relationship between young adults' problem-focused behaviors and their perceptions of mothers' emotion-focused coping,  $F(5, 225) = 2.77, p = .005, R^2 = .03, \beta = .19$ . As illustrated in Figure 8, when young adults had more positive schemas about their mothers, mothers' emotion-coping was positively related to young adults' problem-focused coping ( $b = .71, p < .001$ ), but when young adults had less positive schemas about their mothers, mothers' emotion-focused coping was negatively related to young adults' problem-focused behaviors ( $b = -.79, p < .001, z = 20.87, p < .001$ ).

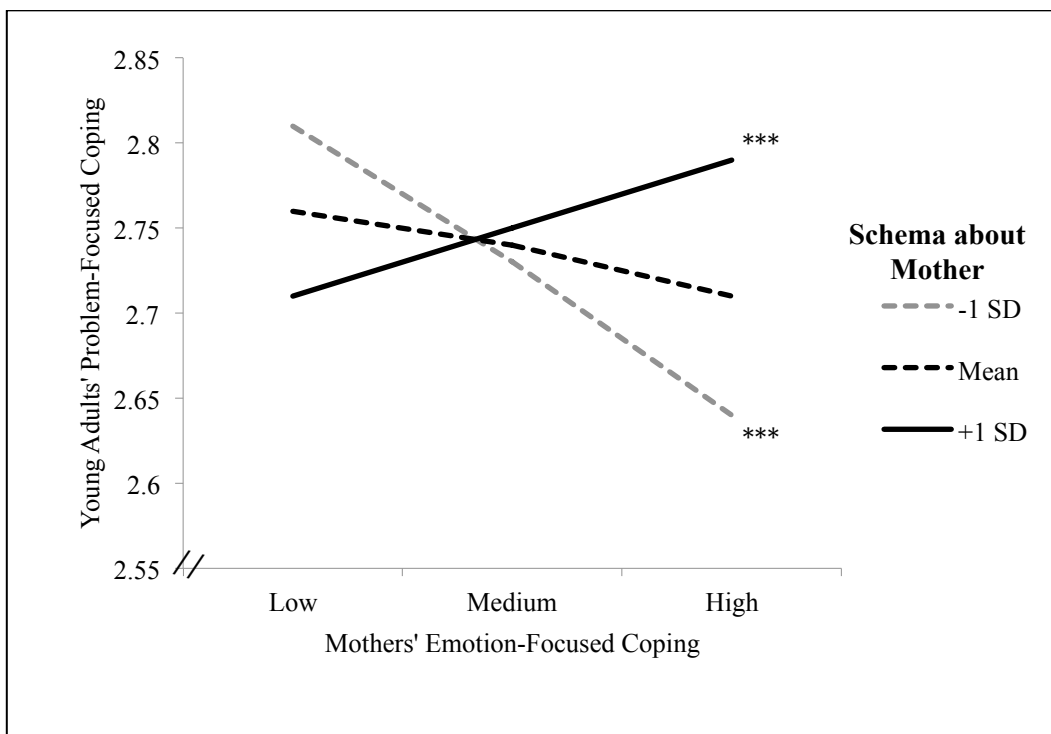


Figure 8. Young adults' schemas about mothers moderate the association between young adults' perception of mothers' emotion-focused coping and young adults' problem-focused coping.

Lastly, young adults' schemas of their fathers influenced the relationship between young adults' perceptions of their fathers' problem-focused coping and their emotion-focused behaviors. As shown in Figure 9, when young adults had more positive schemas of their fathers, their perceptions of their fathers' problem-focused coping was positively related to their own emotion-focused coping ( $b = .28, p = .02$ ), but were negatively related when their schemas of their fathers were less positive ( $b = -.19, p = .10$ ),  $z = 5.11, p < .001$ .

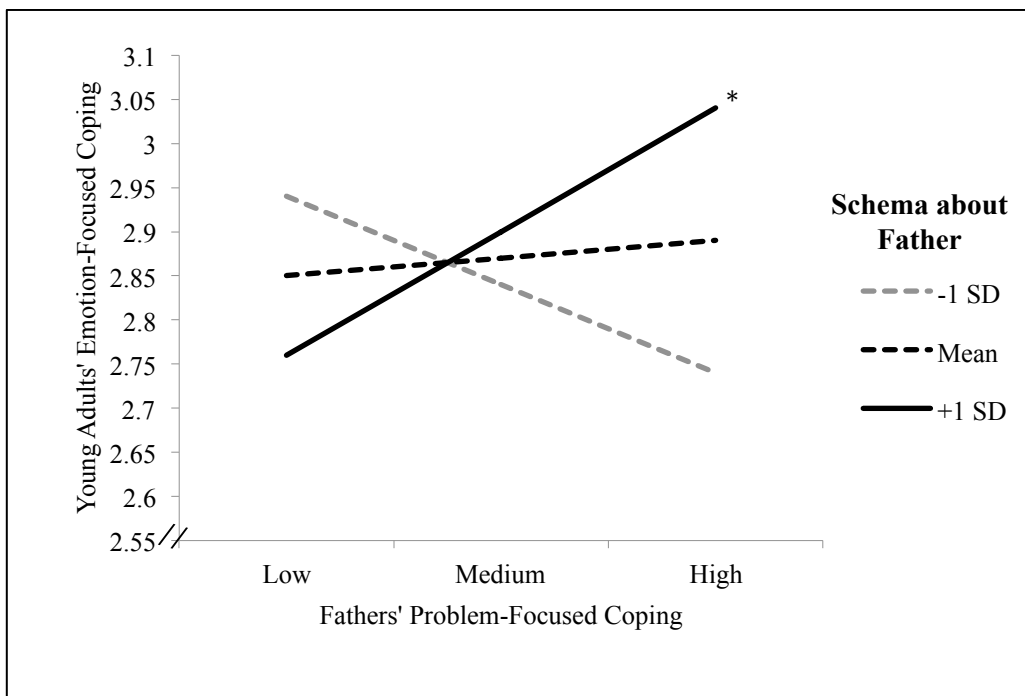


Figure 9. Young adults' schemas about fathers moderate the association between young adults' perception of fathers' problem-focused coping and young adults' emotion-focused coping.

Of the 18 models testing the influence of young adults' parent schemas on the association between their perceptions of their parents' coping suggestions and their own coping behaviors, three models were significant. See Tables 11 and 12 for full statistical information.

First, for young adults' problem-focused coping there was a significant interaction between young adults' schemas of their mothers and their perceptions of their mothers' problem-focused suggestions. As illustrated in Figure 10, when young adults' have more positive schemas of their mothers, the association between their perceptions of their mothers' problem-focused suggestions and their own problem-focused coping had a steeper slope ( $b = .21, p < .001$ ) than when young adults have less positive schemas of their mothers ( $b = .09, p = .04$ ).

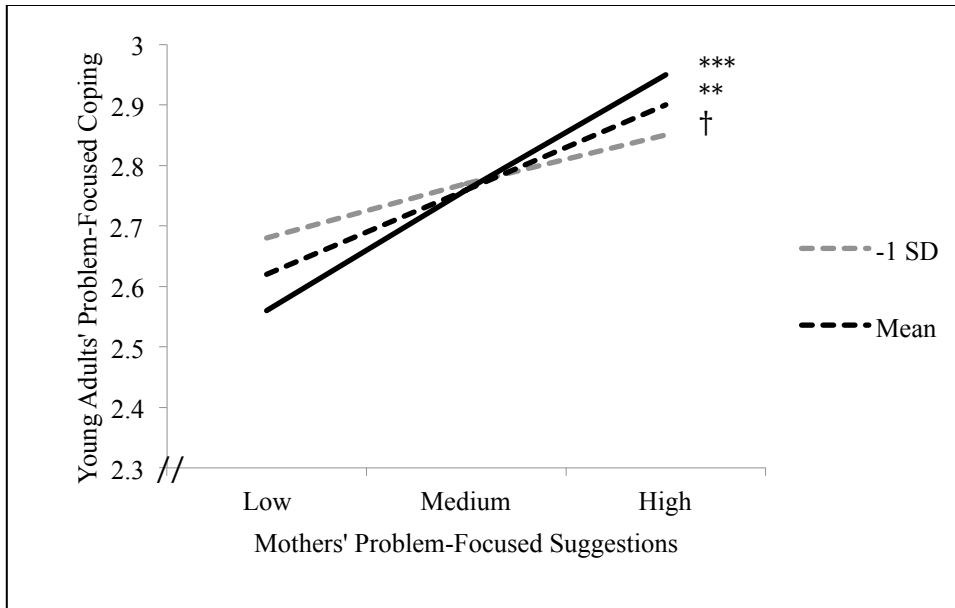


Figure 10. Young adults' schemas of mothers moderate the association between young adults' perception of mothers' problem-focused suggestions and young adults' problem-focused coping.

*archical Regression Analyses Testing the Association between Mothers' Coping Suggestions and the Coping Behaviors of  
 Young Adults and the Moderating Influence of Young Adults' Schemas about their Mothers.*

	Problem-Focused					Emotion-Focused					Avoidance				
	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$	<i>B</i>	SE	$\beta$	$\Delta R^2$	<i>F</i> $\Delta$
<i>df</i> = (1, 229)															
or	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
<i>df</i> = (2, 228)															
or schema	.01	.01	.06	.00	.75	.04	.02	.15	.02	6.21*	-.01	.02	-.05	.00	.52
<i>df</i> = (5, 225)				.09	7.00***				.07	6.30***				.16	14.11
or Problem-focused suggestions	.13	.04	.30**			.10	.06	.17			-.24	.05	-.43***		
or Emotion-focused suggestions	.03	.04	.07			.10	.05	.18†			.04	.05	.07		
or Avoidance suggestions	-.06	.04	-.13			-.07	.04	-.11			.21	.04	.35***		
<i>df</i> = (6, 224)															
or Problem-focused suggestions* Schema	.03	.01	.17	.02	5.90*	.02	.01	.09	.01	1.90	-.02	.01	-.12	.01	2.8
or Emotion-focused suggestions*Schema	.02	.01	.18	.01	2.62	.01	.02	.06	.00	.37	-.01	.02	-.08	.00	.5
or Avoidance suggestions*Schema	.03	.01	.16	.02	5.93*	-.00	.02	-.01	.00	.03	-.01	.02	-.03	.00	.1

.05, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 9 independent analyses.



2.

*hierarchical Regression Analyses Testing the Association between Fathers' Coping Suggestions and the Coping Behaviors of Young Adults and the Moderating Influence of Young Adults' Schemas about their Fathers.*

	Problem-Focused					Emotion-Focused					Avoidance				
	B	SE	β	ΔR <sup>2</sup>	FΔ	B	SE	β	ΔR <sup>2</sup>	FΔ	B	SE	β	ΔR <sup>2</sup>	FΔ
df = (1, 229)															
for Problem-focused coping suggestions	.03	.06	.04	.00	.32	.38	.07	.33	.11	27.84***	-.09	.07	-.09	.01	1.89
df = (2, 228)															
for Emotion-focused coping suggestions	.01	.01	.03	.00	.26	.03	.02	.12	.02	3.91†	.01	.01	.03	.00	.14
df = (5, 225)				.07	5.44***				.06	5.12**				.22	21.66
for Avoidance coping suggestions	.09	.04	.21*			.05	.05	.08			-.21	.04	-.41***		
df = (6, 224)															
for Problem-focused coping suggestions	.02	.01	.13	.01	3.33	.04	.01	.18	.03	7.97**	-.02	.01	-.09	.01	2.2
for Emotion-focused coping suggestions	.00	.01	.01	.00	.04	.01	.01	.04	.00	.45	-.00	.01	-.01	.00	.0
for Avoidance coping suggestions	.01	.01	.04	.00	.34	.00	.02	.01	.00	.04	-.01	.01	-.04	.00	.3

†.05, \*  $p < .025$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 9 identical analyses

Young adults' schemas of their mothers had a rather counterintuitive effect on the relationship between young adults' problem-focused behaviors and their perceptions of mothers' avoidance suggestions. As illustrated in Figure 11, when young adults had more positive schemas about their mothers, mothers' avoidance suggestions had no impact on their problem-focused coping ( $b = .00, p = .96$ ), but when young adults had less positive schemas about their mothers, mothers' avoidance suggestions were negatively related to young adults' problem-focused behaviors ( $b = -.14, p < .001$ ).

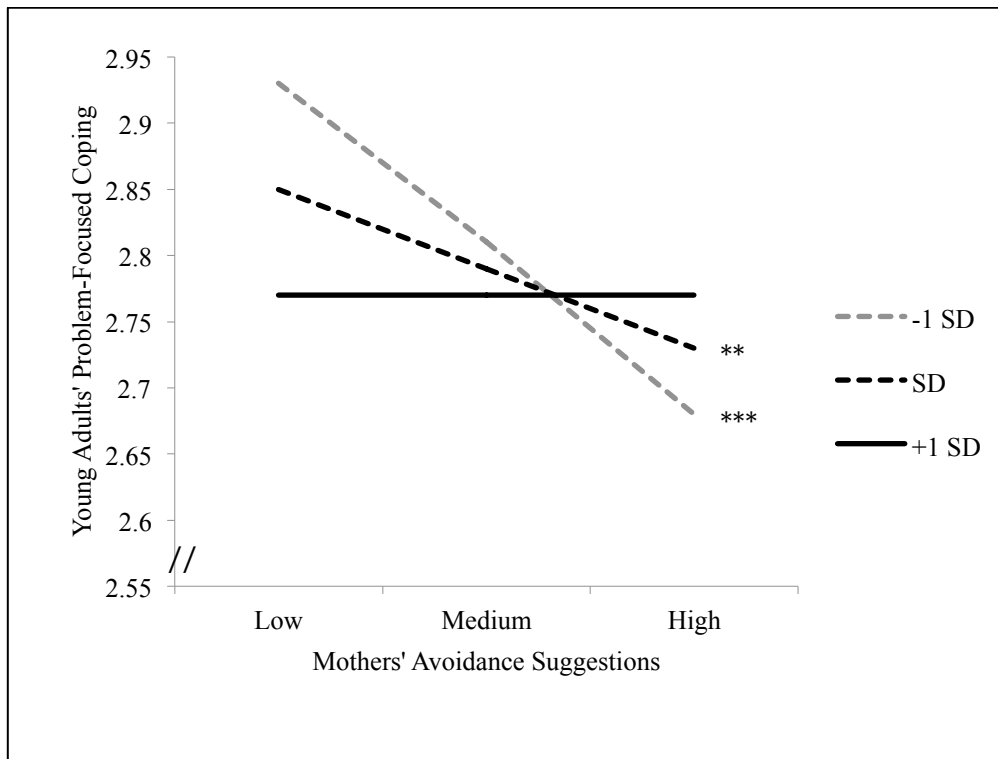


Figure 11. Young adults' schemas of mothers moderate the association between young adults' perception of mothers' avoidance suggestions and young adults' problem-focused coping.

Lastly, young adults' schemas of their fathers influenced the relationship between young adults' perceptions of their fathers' problem-focused suggestions and their emotion-focused behaviors. As shown in Figure 12, when young adults had more positive schemas of their fathers, their perceptions of their fathers' problem-focused coping was positively related to their own emotion-focused coping ( $b = .15, p = .01$ ), but were not significantly related when their schemas of their fathers were less positive ( $b = -.05, p = .39$ ).

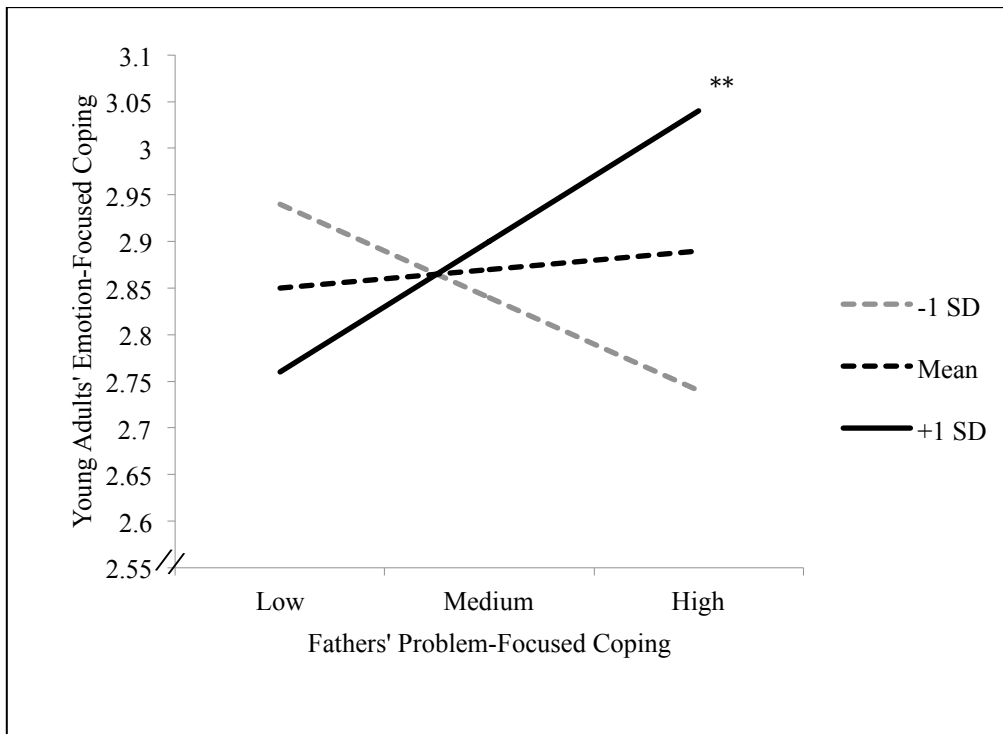


Figure 12. Young adults' schemas of fathers moderate the association between young adults' perception of fathers' problem-focused suggestions and young adults' emotion-focused coping.

## **Discussion**

The overall goal of the current study was to explore parents' influence on young adults' coping by extending the tripartite model (Kliewer et al., 1994) for younger children to young adults and to include an understanding of developing children as more active participants in the socialization process. Specifically, the main goals were to explore the relations between young adults' perceptions of their parents' coping behavior, coping suggestions, and their schemas of their parents as predictors of their own self-reported coping. Further, I hypothesized a moderation model whereby young adults' schemas of their parents would be implicated in the degree to which they accept the socialization influences of their parents. To this end, I had four aims for the current study, and I discuss each of these aims below, followed by the strengths and limitations of this research, ending with directions for future research. See Figure 13 for a summation of the aims supported and not supported in the current study.

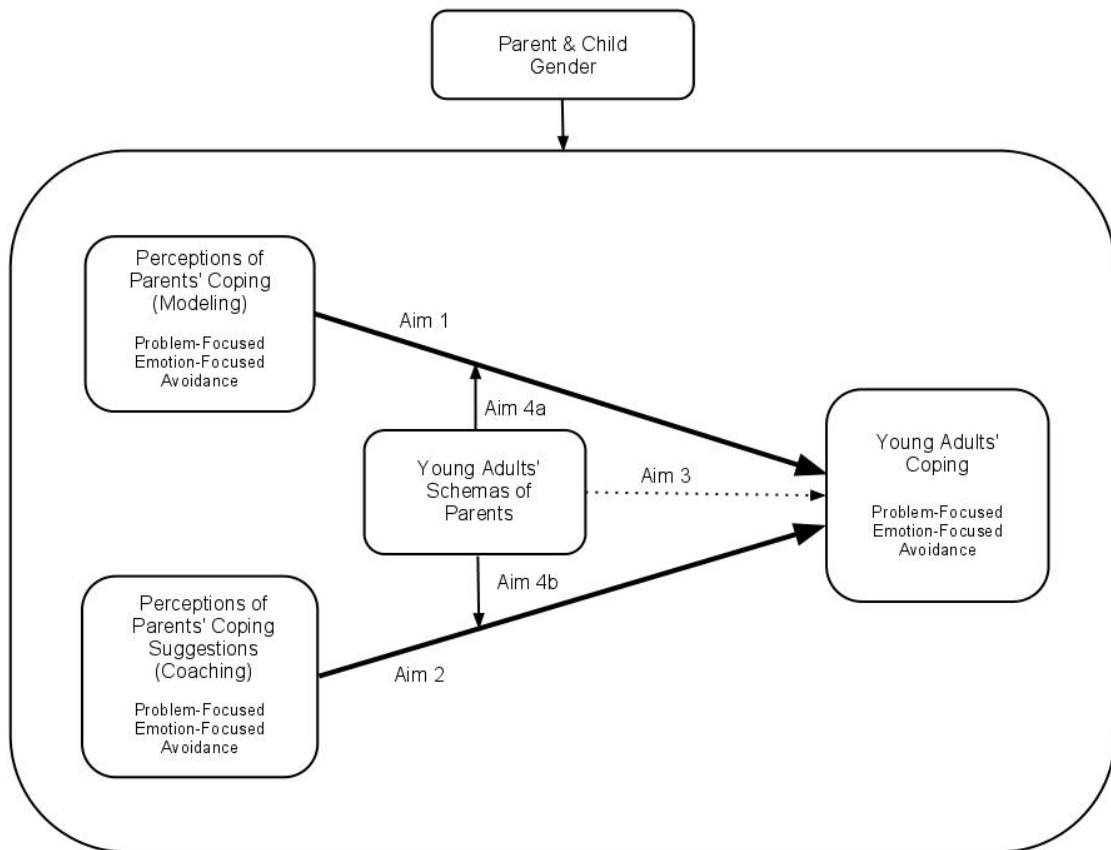


Figure 13. Model of supported and unsupported relations between young adults' perceptions of parents' coping socialization behaviors, schemas about parents, and coping strategies.

*Note:* Bolded solid lines indicate relations mostly supported by the current study, solid lines indicate some supported relations, and a dashed line indicates there was no support found for the hypothesized relation.

### **Aim 1: Young Adults' Perceptions of Parents' Coping Behaviors as Models for Their Own Coping Behaviors**

The first aim was to determine whether young adults' perceptions of their parents' coping behaviors were predictive of their own coping behaviors as suggested by the coping socialization model posited by Kliewer and colleagues (1994). More specifically, I hypothesized that perceptions of parents' coping behaviors would be most predictive of the parallel coping strategy of young adults, and, with one exception, they were. That is, five of the six regression analyses demonstrated that young adults' perceptions of their parents' coping behaviors, both mothers' and fathers', are predictive of their own parallel coping behaviors. The one exception was for young adults' emotion-focused coping, which was only related to young adults'. This is not terribly surprising, however, given the relatively large overlap between these two coping strategies.

Given the many gender differences in coping behaviors (Eschenbeck, Kohlman, & Lohaus, 2007; Sontag & Graber, 2010; Cox, Mezulis, & Hyde, 2010), and the many gender-specific associations found between parents' and children's coping (Kliewer et al., 1996), a secondary goal was to determine if gender would be a significant influence on this pathway in a sample of young adults. Specifically, I predicted a pattern whereby young adults would be more likely to model their same- or other other-sex parent in consistent ways. The gender differences reported in the work by Kliewer and colleagues (1996) were limited to active and support coping only, and many of the gender effects were limited to cross-sex dyads (e.g., father-daughter) in their sample of older children (9- to 12-years old). However in the current

study, gender only mattered for avoidance coping. Specifically, the relationship between mothers' and fathers' avoidance coping and the avoidance coping of young adults was significantly stronger for males than females, suggesting that this effect is a result of something unique to male young adults and not a function of differential socialization by mothers and fathers. It may be that male young adults are particularly influenced by parents' avoidance behaviors because avoidance coping is a part of the male script (Renk & Creasey, 2003). Female young adults, on the other hand, may be buffered from the influence of their parents' avoidance coping, because their gender script encourages greater reliance on emotion-focused coping (Renk & Creasey, 2003).

With that said, it is interesting that there were no other effects for parent-child gender composition (e.g., father-daughter or mother-daughter) in this sample of young adults, especially for the active strategies of problem- and emotion-focused coping. There is some evidence that the desire to follow same-sex models may wax and wane at various developmental stages. For example, older preschoolers (Lynn & Cross, 1974), younger adolescents (Greene & Grimsley, 1990), and adults in the transition to parenthood may have more marked gender-specific relationships with their parents (Buist, Deković, Meeus, & van Aken, 2002), whereas in college, young adults may be less rigid in their adherence to gendered expectations and thereby better able to incorporate the strategies of both parents into their own arsenal of coping techniques.

## **Aim 2: Young Adults' Perceptions of Parents' Coping Suggestions Predicting Their Own Coping Behaviors**

The next aim was to explore the ways in which young adults' reports of their parents' coping suggestions relate to young adults' own coping behaviors. Similarly to the hypotheses made about parents' modeled coping, I hypothesized that young adults' reports of parents' coping suggestions would be most related to young adults' parallel coping behaviors. The results from the regression analyses did show that young adults' perceptions of parents' suggestions are predictive of young adults' parallel coping strategies, but contrary to prediction, parents' suggestions were not significantly more predictive of young adults' parallel coping strategies than their other coping behaviors. For instance, both fathers' problem-focused and avoidance suggestions were predictive of young adults' problem-focused coping, albeit in opposite directions. A similar pattern was found for young adults' avoidance coping, but here both mothers' and fathers' problem-focused and avoidance suggestions were predictive, again in opposing directions. Thus, when parents promote problem-focused coping, young adults are more likely to engage in problem-focused behaviors and less likely to turn to avoidance strategies, but when parents promote avoidance strategies, young adults appear to heed their suggestions and also refrain from using problem-focused behaviors.

For young adults' emotion-focused coping, only mothers' emotion-focused coping suggestions were related, and only at trend-levels. On the other hand, both fathers' problem-focused and avoidance suggestions were predictive, again in opposing directions as with



young adults' problem-focused coping. Interestingly, fathers' suggestions (six significant associations) were associated more broadly with young adults' coping behaviors than were the suggestions of mothers (three significant associations, one trend-level association). This may be due to the greater power implicitly given to fathers by young adults than to mothers, and thus suggestions are considered and incorporated more fully.

As above, a secondary goal was to explore gender differences in the relations between parents' coping suggestions and the coping behaviors of young adults. In keeping with the modeling pathway, gender only moderated the relationship between mothers' and fathers' avoidance suggestions and the avoidance coping of young adults. In contrast to the results found for parents' avoidance behaviors, parents' avoidance suggestions were more strongly related to female young adults' avoidance coping than for male young adults. Follow-up analyses revealed that this effect was due to male young adults' associations with parents' socialization behaviors. Specifically, male young adults' appear to be more greatly impacted by their parents' modeling of avoidance than by their suggestions, whereas female young adults are similarly impacted by both forms of socialization.

### **Aim 3: Relations between Young Adults' Parent Schemas and Their Own Coping Behaviors**

The third aim of the current study was to examine young adults' schemas of their mothers and fathers as predictors of their own coping behaviors. Previous research suggests that adolescents who perceive their parents as warm and supportive are more likely to use problem-solving and support-seeking coping strategies than adolescents who perceive their

parents as rejecting (Meesters & Muris, 2004). There is evidence that the effects of parental warmth varies as a function of the gender composition of the parent-child dyad. Specifically, boys and men seem to be particularly affected by their relationships with their parents in terms of their coping outcomes, especially by the warmth of their fathers (Greenberger & McLaughlin, 1998; Kliewer et al., 1996; Mallers et al., 2010).

Contrary to predictions, neither young adults' schemas of their mothers nor their fathers were significantly related to young adults' self-reported coping strategies. In addition, there were no moderating effects of gender. These null effects are rather surprising given the rather clear links between parental warmth and coping found in the existing literature. Because research regarding relationship schemas is currently in its infancy, it is possible that, contrary to my assumptions, the parent schema methodology used in the current study did not tap into the same parenting constructs that have been more directly linked to children's coping (e.g., warmth, affection, rejection, etc.). However, research with younger children does suggest that children's schemas about their parents are predicted by parents' behaviors in expected ways (Carlson et al., 2004; MacFie et al., 1999; Shields et al., 2001), suggesting that the same would hold for older adolescents. That young adults' schemas did not predict young adults' coping as expected, suggests that there may be a developmental difference in the way older and younger children construct their parent schemas. Whereas the schemas of younger children may be tied more directly to parents' behaviors, according to the generational stake theory (Acock & Bengtson, 1980), young adults have an increasing psychological need to individuate themselves from their parents and thus may focus more on

the negative aspects of their parents at the expense of their parents' positive qualities (Aquilino, 1999). Thus, young adults' schemas may be less coherent with the reality of the parent-child relationship than the parent schemas of individuals at other points in the lifespan.

#### **Aim 4: The Moderating Role of Young Adults' Schemas about Their Parents**

The fourth and final aim of the current study was to explore how young adults' schemas of their parents might moderate the associations between perceptions of parents' coping behaviors and suggestions and young adults' self-reported coping behaviors. Consistent with the motivational model of child socialization (Darling & Steinberg, 1993; Skinner et al., 2005; Steinberg, 2001), I predicted that young adults would use their evaluations of their parents as a criterion for whether or not to model or heed the coping behaviors and suggestions of their parents.

In general, there was some support for the prediction that young adults with more positive schemas would be more likely to model and heed their parents' coping behaviors and suggestions with seven of the 36 models being significant. Even though this proportion seems rather insignificant, interesting patterns emerge. Specifically, the impact of young adults' schemas was especially prominent for problem-focused coping. For both mothers' and fathers' problem-focused behaviors, and for mothers' problem-focused suggestions, when young adults' schemas were more positive about their mothers and fathers, they were more likely to report engaging in problem-focused coping themselves.

Additional support for the importance of young adults' schemas in their own socialization process was garnered from the findings for young adults' emotion-focused coping. Specifically, both the influence of fathers' problem-focused behaviors and suggestions on young adults' emotion-focused coping were moderated by young adults' evaluations of their fathers. When young adults provided more positive schemas about their fathers, there was a positive relationship between both fathers' problem-focused coping and suggestions and the emotion-focused coping of young adults. When young adults had less positive schemas about their fathers, however, this relationship was reversed.

These results provide some evidence for the hypothesis of the current study and also validate previous work suggesting that adolescents' perceptions of parents do matter for the efficacy of parents' socialization attempts (Carlson et al., 2004; Darling, Cumsille, & Martinez, 2007; Guilamo-Ramos et al., 2006).

Young adults' schemas also influenced their problem-focused behaviors in other less expected ways. Of particular interest was the way in which young adults' schemas of their mothers operated to modulate the impact of mothers' avoidance suggestions. Specifically, when young adults had more positive schemas of their mothers, mothers' avoidance suggestions had no impact on their problem-focused coping. However, when young adults had less positive schemas of their mothers, mothers' avoidance suggestions negatively impacted young adults' problem-focused coping. Further research exploring what factors may diminish young adults' usage of problem-solving strategies could be used to develop, or enhance existing, prevention programs for younger children to promote later resiliency.

Finally, there were no moderating effects of young adults' schemas on their avoidance coping. In hindsight it makes sense that young adults' evaluations of their parents would not necessarily affect the degree to which they engage in less effective coping strategies. Given this, the fact that there were seven significant interactions for young adults' schemas on the relations between parents' coping socialization and young adults' coping is substantial, indicating that young adults' evaluations of their parents do matter.

### **Limitations of Study**

One limitation of the current study was the reliance on young adults' perceptions of their parents' behaviors and suggestions. I do not suggest that these perceptions are accurate in terms of what parents may actually do or say, although research does suggest that children are at times more accurate than parents (Gonzales, Cauce, & Mason, 1996). However, research is accumulating to suggest that perceptions may be as or even more influential than "reality" (Schwarz et al., 1985; Dittus & Jaccard, 2000; Guilamo-Ramos et al., 2006; Bogenschneider & Pallock, 2008). Also of note is that in the current study, although I relied on the self-reports of only one individual, participants were clearly differentiating across their reports given the different patterns of effects and the generally modest associations between their perceptions of their parents and their own behaviors. Of course, future research could help to understand these socialization pathways more fully by including reports by both parents and young adults, as these different perspectives might predict different child outcomes. Further, the distance between parent and child reports may be an important

variable in and of itself as it may be an indicator of relationship dysfunction (Bogenschneider & Pallock, 2008).

Another limitation of the current study was the exclusive use of questionnaires to assess two of the major aims, which may have inflated relationships between variables due to shared method variance. Thus, the results regarding the direct relationships between parents' behaviors and suggestions and the coping of young adults should be interpreted with particular caution. However, given that young adults' avoidance coping was differently predicted by parents' behaviors and suggestions as a function of participant gender, there is some evidence that these constructs are operating independently of one another.

With regard to the supported moderation model, there is less concern that these results are inflated, given that here it is clearer that two independent constructs-- issues related to coping and their feelings about their parents-- were assessed. The independence of these constructs is evident in the lack of significant findings for direct associations between these variables. Additionally, the type of measurement also varied in the moderation model; young adults' parent schemas were measured via 5-minute, open-ended oral descriptions of their parents, rather than traditional questionnaires. Further, that young adults' schemas of their mothers and fathers each moderated the relationships between parents' behaviors and suggestions and young adults' own coping behaviors in expected and rather systematic ways suggests the power of this methodology.

## **Future Research**

The current study was an important first step in understanding the sustained parental influence on the development of young adults' coping strategies; however, more research is needed to understand this process more fully. Although it was beyond the scope of the current study to include more than young adults' perceptions, future research can now begin asking questions about the differential impacts of parents' and children's perceptions and beliefs about coping and the parent-child relationship. By assessing both parents' reports of their coping behaviors and suggestions as well as their schemas of their children, we would be able to determine if parents modulate their coping socialization efforts in accordance with their schematic portrayal of their children. And, by improving the methodology to include observational data, extensions of the current study could also determine how different children's perceptions are from the perceptions of non-involved others to assess whether children are interpreting their parents' behaviors and suggestions in accurate ways, or if their perceptions are clouded by their evaluations of their parents.

Future research could also examine the proposed model longitudinally to determine if the impact of children's perceptions on their development strengthen or weaken over time. By doing so, we would better understand the possible reciprocal relationship between coping and children's and parents' schemas of one another. For example, it may be that parents and children who are oriented towards active coping may be more likely to solve relationship issues than parents and/or children who lean more towards avoidance.

Finally, the current study offers a number of contributions to the existing coping and parental socialization literature. First, because previous research has relied exclusively on parents' reports of their own behavior, the proposed study provides, for the first time, information about the kinds of coping messages young adults are internalizing from their parents. Second, this study provides new data about children's role in their own coping socialization. Although theory in the developmental arena has emphasized bidirectionality within relationships, models have not specifically tested whether children interpret and/or internalize parents' socialization attempts as a function of their thoughts about that parent. The results from the current study suggest the power of young adults in their own development.

### **Conclusion**

Overall, young adults' perceptions of their parents' coping behaviors and suggestions predicted their own self-reported coping strategies. Interestingly, perceptions of parents' avoidance behaviors and suggestions impacted male and female young adults in different ways. Specifically, parents' avoidance behaviors were significantly more related to male young adults' avoidance coping than females' avoidance coping, whose avoidance coping was more significantly related to parents' avoidance suggestions than males' avoidance coping.

Surprisingly, young adults' schemas about their parents were not related to their own coping behaviors, which stands in contrast to the existing literature (Dusek & Danko, 1994; Gomez & McLaren, 2006; Kliewer et al., 1996; Meesters & Muris, 2004), but this may be a



result of different methodologies used and different developmental stages of the samples. Generally research has relied on either (a) parents' reports of their parenting qualities or (b) adolescents' perceptions of parents' using traditional questionnaires. Thus, it is possible that the use of relationship schemas as a proxy for parents' support and warmth limited the viability of these predictions. Alternatively, it could be that due to young adults' greater cognitive complexity compared to older children and young adolescents; their evaluations of parents may have simply been based on other aspects of their parents' attributes and behaviors. To empirically address this proposition, future research should examine young adults' schemas of their parents in more microanalytic ways to better understand the types of evidence young adults' provide when justifying their thoughts and feelings about their parents.

What is most exciting about the current study is that the hypothesized moderation model of young adults' schemas was supported in a number of ways. Although young adults' parent schemas do not directly impact their coping behaviors, they do seem to affect young adults' openness to their parents coping socialization efforts, for better or worse. As expected, when young adults have positive attributions of their parents, they are more likely to follow their example and take their advice. The story of how less positive schemas operate to modify young adults' coping behaviors is less obvious, but what is clear is that they work to reduce positive, adaptive coping behaviors.

## References

- Acock, A., & Bengtson, V. (1980). Socialization and attribution processes: Actual versus perceived similarity among parents and youth. *Journal of Marriage and the Family*, *42*, 501-515.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA US: Sage Publications, Inc.
- Aldwin, C. M. (1994). *Stress, coping, and development: An integrative perspective*. New York, NY US: Guilford Press.
- Aldwin, C. M., & Revenson, T. A. (1987). Does coping help? A reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology*, *53*, 337-348. doi:10.1037/0022-3514.53.2.337.
- Aldwin, C. M., Sutton, K. J., Chiara, G., & Spiro, A. (1996). Age differences in stress, coping, and appraisal: Findings from the Normative Aging Study. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *51B*, 179-188.
- Acquilino, W. S. (1999). Two views of one relationship: Comparing parents' and young adult children's reports of the quality of intergenerational relations. *Journal of Marriage and Family*, *61*, 858-870.
- Ayers, T. S., Sandler, I. N., West, S. G., & Roosa, M. W. (1996). A dispositional and situational assessment of children's coping: Testing alternative models of coping. *Journal of Personality*, *64*, 923-958. doi:10.1111/j.1467-6494.1996.tb00949.x

- Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin, 112*, 461-484. doi:10.1037/0033-2909.112.3.461
- Bandura, A. (1977). *Social learning theory*. Oxford England: Prentice-Hall.
- Barrett, K. C., & Campos, J. J. (1987). Perspectives on emotional development II: A functionalist approach to emotions. In J. Osofsky (Ed.) *Handbook of infant development (2nd ed.)* (pp. 555-578). Oxford England: John Wiley & Sons.
- Billings, A. G. & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine, 4*, 139-157. doi: 10.1007/BF00844267
- Biringen, Z., Clyman, R. B., & Oppenheim, D. (1991). The moral self of infancy: Affective core and procedural knowledge. *Developmental Review, 11*, 251-270. doi: 10.1016/0273-2297(91)90013-E
- Blount, R. L., Bachanas, P. J., Powers, S. W., & Cotter, M. C. (1992). Training children to cope and parents to coach them during routine immunizations: Effects on child, parent, and staff behaviors. *Behavior Therapy, 23*, 689-705. doi:10.1016/S0005-7894(05)80229-1.
- Blount, R. L., Powers, S. W., Cotter, M. W., & Swan, S. (1994). Making the system work: Training pediatric oncology patients to cope and their parents to coach them during BMA/LP procedures. *Behavior Modification, 18*, 6-31. doi:10.1177/01454455940181002

- Bogensneider, K., & Pallock, L. (2008). Responsiveness in parent-adolescent relationships: Are influences conditional? Does the reporter matter? *Journal of Marriage and Family, 70*, 1015-1029.
- Bramsen, I., Bleiker, E. M., Triemstra, A. H., & Van Rossum, S. M. (1995). A Dutch adaptation of the Ways of Coping Questionnaire: Factor structure and psychometric properties. *Anxiety, Stress & Coping: An International Journal, 8*, 337-352.  
doi:10.1080/10615809508249383.
- Buist, K. L., Deković, M., Meeus, W., & van Aken, M. A. G. (2002). Developmental patterns in adolescent attachment to mother, father and sibling. *Journal of Youth and Adolescence, 31*, 167-176. doi: 10.1023/A:1015074701280.
- Bullock, B. M. & Dishion, T. J. (2007). Family processes and adolescent problem behavior. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*, 396-407.  
doi: 10.1097/chi.0b013e31802d0b27
- Bullock, B. M., Dishion, T. J., & Myers, M. W. (2009, April). The family context of adolescent self-regulation: Differential predictive validity of adolescent and parent relationship schemas. In G. M. Fosco (Chair), Applications of family systems theory for understanding children's emotional and behavioral self-regulation. Paper presented at the biennial meeting of the Society for Research in Child Development, Denver, CO. Bullock,

- Bullock, B.M., Schnieger, A., & Dishion, T. J. (2005). Manual for Coding Five-Minute Speech Samples Using the Family Affective Attitude Rating Scale (FAARS). Available from the Child and Family Center, 195 West 12th Avenue, Eugene, OR 97401-3408.
- Carlson, E. A., Sroufe, L., & Egeland, B. (2004). The construction of experience: A longitudinal study of representation and behavior. *Child Development, 75*, 66-83. doi:10.1111/j.1467-8624.2004.00654.x.
- Carver, C. S. & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology, 66*, 184-195. doi: 10.1037/0022-3514.66.1.184
- Carver, C., Scheier, M., & Weintraub, J. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267-283. doi:10.1037/0022-3514.56.2.267.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*, 300-314.
- Jacob Cohen (1988). *Statistical Power Analysis for the Behavioral Sciences* (second ed.). Lawrence Erlbaum Associates.
- Compas, B. E. (1998). An agenda for coping research and theory: Basic and applied developmental issues. *International Journal of Behavioral Development, 22*, 231-237. doi:10.1080/01650259838435

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, *127*, 87-127. doi:10.1037/0033-2909.127.1.87

Compas, B., Malcarne, V., & Fondacaro, K. (1988). Coping with stressful events in older children and young adolescents. *Journal of Consulting and Clinical Psychology*, *56*, 405-411. doi:10.1037/0022-006X.56.3.405

Cox, S. J., Mezulis, A. H., & Hyde, J. S. (2010). The influence of child gender role and maternal feedback to child stress on the emergence of the gender difference in depressive rumination in adolescence. *Developmental Psychology*, *46*, 842-852. doi:10.1037/a0019813

Darling, N., Cumsille, P., & Martinez, M. L. (2007). Adolescents' as active agents in the socialization process: Legitimacy of parental authority and obligation to obey as predictors of obedience. *Journal of Adolescence*, *297-311*. doi:10.1016/j.adolescence.2006.03.003.

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, *113*, 487-496. doi:10.1037/0033-2909.113.3.487.

Denham, S. A., Mitchell-Copeland, J. Strandberg, K., Auerbach, S., Blair, K. (1997). Parental contributions to preschoolers' emotional competence: Direct and indirect effects. *Motivation and Emotion*, *21*, 65-86. doi: 10.1023/A:1024426431247.

- Dittus, P. J., & Jaccard, J. (2000). Adolescents' perceptions of maternal disapproval of sex: Relationship to sexual outcomes. *Journal of Adolescent Health, 26*, 268-278.  
doi:10.1016/S1054-139X(99)00096-8
- Dusek, J., & Danko, M. (1994). Adolescent coping styles and perceptions of parental child rearing. *Journal of Adolescent Research, 9*, 412-426. doi:10.1177/074355489494002
- Ebata, A., & Moos, R. (1991). Coping and adjustment in distressed and healthy adolescents. *Journal of Applied Developmental Psychology, 12*, 33-54. doi:10.1016/0193-3973(91)90029-4
- Edwards, J. R., & O'Neill, R. M. (1998). The construct validity of scores on the Ways of Coping Questionnaire: Confirmatory analysis of alternative factor structures. *Educational and Psychological Measurement, 58*, 955-983.  
doi:10.1177/0013164498058006007.
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry, 9*, 241-273. doi:10.1207/s15327965pli0904\_1
- Eisenberg, N., Fabes, R. A., Carlo, G., & Karbon, M. (1992). Emotional responsivity to others: Behavioral correlates and socialization antecedents. In N. Eisenberg & R. A. Fabes (Eds.), *Emotion and its regulation in early development: New directions in child development*. (pp. 57-74). San Francisco: Jossey-Bass.
- Eisenberg, N., & Fabes, R. A. (1994). Mothers' reactions to children's negative emotions: Relations to children's temperament and anger behavior. *Merrill-Palmer Quarterly: Journal of Developmental Psychology, 40*, 138-156.

- Eisenberg, N., Fabes, R. A., & Murphy, B. C. (1996). Parents' reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Development, 67*, 2227-2247. doi:10.2307/1131620
- Eschenbeck, H., Kohlmann, C. W., Lohaus, A. (2007). Gender differences in coping strategies in children and adolescents. *Journal of Individual Differences, 28*, 18-26. doi: 10.1027/1614-0001.28.1.18.
- Flavell, J. H. (1999). Cognitive development: Children's knowledge about the mind. *Annual Review of Psychology, 50*, 21-45. doi:10.1146/annurev.psych.50.1.21
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology, 48*, 150-170. doi:10.1037/0022-3514.48.1.150.
- Gecas, V., & Schwalbe, M. L. (1986). Parental behavior and adolescent self-esteem. *Journal of Marriage & the Family, 48*, 37-46. doi:10.2307/352226
- Gonzales, N. A., Cauce, A. M., & Mason, C. A. (1996). Interobserver agreement in the assessment of parental behavior and parent-adolescent conflict: African American mothers, daughters, and independent observers. *Child Development, 67*, 1483-1498. doi:10.2307/1131713
- Goodwin, R., Carlo, G., & Torquati, J. (2006). The role of child emotional responsiveness and maternal negative emotion expression in children's coping strategy use. *Social Development, 15*, 591-611. doi:



- Graber, J. A., & Sontag, L. M. (2009). Internalizing problems during adolescence. In R. Lerner & L. Steinberg (Eds.) *Handbook of adolescent psychology, Vol 1: Individual bases of adolescent development (3rd ed.)* (pp. 642-682). Hoboken, NJ US: John Wiley & Sons Inc.
- Greenberger, E., & McLaughlin, C. S. (1998). Attachment, coping, and explanatory style in late adolescence. *Journal of Youth and Adolescence, 27*, 121-139.  
doi:10.1023/A:1021607627971.
- Greene, A. L. & Grimsley, M. D. (1990). Age and gender differences in adolescents' preferences for parental advice. *Journal of Adolescent Research, 5*, 396-413.  
doi: 10.1177/074355489054002.
- Guilamo-Ramos, V., Jaccard, J., Dittus, P., & Bouris, A. M. (2006). Parental expertise, trustworthiness, and accessibility: Parent-adolescent communication and adolescent risk behavior. *Journal of Marriage and Family, 68*, 1229-1246. doi:10.1111/j.1741-3737.2006.00325.x
- Hatton, C., Knussen, C., Sloper, P., & Turner, S. (1995). The stability of the Ways of Coping (Revised) Questionnaire over time in parents of children with Down's syndrome: A research note. *Psychological Medicine: A Journal of Research in Psychiatry and the Allied Sciences, 25*, 419-422. doi:10.1017/S003329170003631X.
- Hoffman, M. A., & Levy-Shiff, R. (1994). Coping and locus of control: Cross-generational transmission between mothers and adolescents. *The Journal of Early Adolescence, 14*, 391-405. doi:10.1177/0272431694014003005

- Hughes, D., Bachman, M., Ruble, D., & Fuligni, A. (2006). Tuned in or tuned out: Parents' and children's interpretation of parental racial/ethnic socialization practices. In: *Child psychology: A handbook of contemporary issues (2nd ed.)* (pp. 591-610). New York, NY US: Psychology Press.
- Jones, S., Miller, P.A., Ayers, T., Ying, W., Ayers, T., & Beard, R. (2006, April). Validation and Replication of a Cross-Ethnic 8-Factor Model of Coping Socialization, Poster Paper presented at the Association of Psychological Science, New York, NY
- Kliewer, W., Fearnow, M. D., & Miller, P. A. (1996). Coping socialization in middle childhood: Tests of maternal and paternal influences. *Child Development, 67*, 2339-2357. doi:10.2307/1131627
- Kliewer, W., Sandler, I., & Wolchik, S. (1994). Family socialization of threat appraisal and coping: Coaching, modeling, and family context. In F. Nestmann & K. Hurrelmann (Eds.) *Social networks and social support in childhood and adolescence* (pp. 271-291). Oxford England: Walter De Gruyter.
- Kochanska, G., & Aksan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. *Child Development, 66*, 236-254. doi:10.2307/1131203.
- Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lynn, D. B. & Cross, A. D. (1974). Parent preference of preschool children. *Journal of Marriage and Family, 36*, 555-559.

- Macfie, J., Toth, S. L., Rogosch, F. A., Robinson, J., Emde, R. N., & Cicchetti, D. (1999). Effect of maltreatment on preschoolers' narrative representations of responses to relieve distress and of role reversal. *Developmental Psychology, 35*, 460-465. doi:10.1037/0012-1649.35.2.460.
- Magaña, A. B., Goldstein, M. J., Karno, M., & Miklowitz, D. J. (1986). A brief method for assessing expressed emotion in relatives of psychiatric patients. *Psychiatry Research, 17*, 203-212. doi:10.1016/0165-1781(86)90049-1.
- Mallers, M. H., Charles, S. T., Neupert, S. D., & Almeida, D. M. (2010). Perceptions of childhood relationships with mother and father: Daily emotional and stressor experiences in adulthood. *Developmental Psychology*, doi:10.1037/a0021020.
- Meesters, C., & Muris, P. (2004). Perceived parental rearing behaviours and coping in young adolescents. *Personality and Individual Differences, 37*, 513-522. doi:10.1016/j.paid.2003.09.022
- Miller, P. A., Kliewer, W., Hepworth, J. T., & Sandler, I. N. (1994). Maternal socialization of children's postdivorce coping: Development of a measurement model. *Journal of Applied Developmental Psychology, 15*, 457-487. doi:10.1016/0193-3973(94)90042-6.
- Monnier, J., Hobfoll, S. E., Dunahoo, C. L., Hulsizer, M. R., & Johnson, R. (1998). There's more than rugged individualism in coping. Part 2: Construct validity and further model testing. *Anxiety, Stress & Coping: An International Journal, 11*, 247-272. doi:10.1080/10615809808248314

- Moos, R. H., & Holahan, C. J. (2003). Dispositional and contextual perspectives on coping: Toward an integrative framework. *Journal of Clinical Psychology, 59*, 1387-1403. doi:10.1002/jclp.10229.
- Nichols, T. R., Graber, J. A., Brooks-Gunn, J., & Botvin, G. J. (2006). Sex differences in overt aggression and delinquency among urban minority middle school students. *Journal of Applied Developmental Psychology, 27*, 78-91. doi:10.1016/j.appdev.2005.12.006
- Papini, D. R., Roggman, L. A., Anderson, J. (1991) Early-adolescent perceptions of attachment to mother and father: A Test of the emotional-distancing and buffering hypotheses. *The Journal of Early Adolescence, 11*, 158. doi: 10.1177/0272431691112006
- Pelegriana, S., García-Linares, M. C., & Casanova, P. F. (2003). Adolescents and their parents' perceptions about parenting characteristics. Who can better predict the adolescent's academic competence?. *Journal of Adolescence, 26*, 651-665. doi:10.1016/S0140-1971(03)00062-9
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science, 8*, 162-166.
- Power, T. (2004). Stress and coping in childhood: The parents' role. *Parenting: Science and Practice, 4*, 271-317. doi:10.1207/s15327922par0404\_1

- Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, *128*, 330-366. doi:10.1037/0033-2909.128.2.330.
- Renk, K. & Creasey, G. (2003). The relationship of gender, gender identity, and coping strategies in late adolescents. *Journal of Adolescence*, *2*, 159-168. doi:10.1016/S0140-1971(02)00135-5
- Rexrode, K. R., Petersen, S., & O'Toole, S. (2008). The Ways of Coping Scale: A reliability generalization study. *Educational and Psychological Measurement*, *68*, 262-280. doi: 10.1177/0013164407310128.
- Scarr, S. (1992). Developmental theories for the 1990s: Development and individual differences. *Child Development*, *63*, 1-19. doi:10.2307/1130897.
- Scarr, S., & McCartney, K. (1983). How people make their own environments: A theory of genotype → environment effects. *Child Development*, *54*, 424-435.
- Schwarz, J. C., Barton-Henry, M. L., & Pruzinsky, T. (1985). Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. *Child Development*, *56*, 462-479. doi:10.2307/1129734
- Seiffge-Krenke, I. & Klessinger, N. (2000). Long-term effects of avoidant coping on adolescents' depressive symptoms. *Journal of Youth and Adolescence*, *29*, 617-630. doi: 0047-2891/00/1200-0617

- Shaw, B. A., Krause, N., Chatters, L. M., Connell, C. M., & Ingersoll-Dayton, B. (2004). Emotional support from parents early in life, aging, and health. *Psychology and Aging, 19*, 4-12. doi:10.1037/0882-7974.19.1.4.
- Shields, A., Ryan, R. M., & Cicchetti, D. (2001). Narrative representations of caregivers and emotion dysregulation as predictors of maltreated children's rejection by peers. *Developmental Psychology, 37*, 321-337. doi:10.1037/0012-1649.37.3.321.
- Shortt, J. W., Stoolmiller, M., Smith-Shine, J. N., Eddy, J. M., & Sheeber, L. (2010). Maternal emotion coaching, adolescent anger regulation, and siblings' externalizing symptoms. *The Journal of Child Psychology and Psychiatry, 51*, 799-808. doi:10.1111/j.1469-7610.2009.02207.x.
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin, 129*, 216-269. doi: 10.1037/0033-2909.129.2.216.
- Skinner, E. A., Johnson, S., & Snyder, T. (2005). Six dimensions of parenting: A motivational model. *Parenting: Science and Practice, 5*, 175-235. doi:10.1207/s15327922par0502\_3
- Skinner, E. A., Zimmer-Gembeck, M. J. (2007). The development of coping. *Annual Review of Psychology, 58*, 119-144. doi: 10.1146/annurev.psych.58.110405.085705.
- Smith, G. T., Miller, T. L., Kroll, L., Simmons, J. R., & Gallen, R. (1999). Children's perceptions of parental drinking: The eye of the beholder. *Journal of Studies on Alcohol, 60*, 817-824.

- Smollar, J., & Youniss, J. (1989). Transformations in adolescents' perceptions of parents. *International Journal of Behavioral Development, 12*, 71-84.  
doi:10.1177/016502548901200104.
- Sontag, L. M., & Graber, J. A. (2010). Coping with perceived peer stress: Gender-specific and common pathways to symptoms of psychopathology. *Developmental Psychology*,  
doi:10.1037/a0020617.
- Sørli, T., & Sexton, H. C. (2001). The factor structure of 'The Ways of Coping Questionnaire' and the process of coping in surgical patients. *Personality and Individual Differences, 30*, 961-975. doi:10.1016/S0191-8869(00)00086-6.
- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Research on Adolescence, 11*, 1-19. doi: 10.1111/1532-7795.00001.
- Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development, 63*, 1266-1281.  
doi:10.2307/1131532.
- Tamres, L. K., Janicki, D., & Helgeson, V. S. (2002). Sex differences in coping behavior: A meta-analytic review and an examination of relative coping. *Personality and Social Psychology Review, 6*, 2-30. doi:10.1207/S15327957PSPR0601\_1.
- Taylor, S. E., Lerner, J. S., Sage, R. M., Lehman, B. J., & Seeman, T. E. (2004). Early environment, emotions, responses to stress, and health. *Journal of Personality, 72*, 1365-1394. doi: 10.1111/j.1467-6494.2004.00300.x

- Tobin, D. L., Holroyd, K. A., Reynolds, R. V., & Wigal, J. K. (1989). The hierarchical factor structure of the Coping Strategies Inventory. *Cognitive Therapy and Research, 13*, 343-361. doi:10.1007/BF01173478
- Valiente, C., Fabes, R., Eisenberg, N., & Spinrad, T. (2004). The relations of parental expressivity and support to children's coping with daily stress. *Journal of Family Psychology, 18*, 97-106. doi:10.1037/0893-3200.18.1.97
- Vitaliano, P. P., Russo, J. Carr, J. E., Maiuro, R. D., & Becker, J. (1985). The Ways of Coping Checklist: Revision and psychometric properties. *Multivariate Behavioral Research, 20*, 3-26. doi: 10.1207/s15327906mbr2001\_1.
- Zelikovsky, N., Rodrigue, J. R., & Gidycz, C. A. (2001). Reducing parent distress and increasing parent coping-promoting behavior during children's medical procedure. *Journal of Clinical Psychology in Medical Settings, 8*, 273-281. doi:10.1023/A:10119688300



## APPENDIX

## Appendix A Pilot Study

The purpose of the pilot study was to determine the feasibility of the method as well as to determine the utility of the proposed measures. A pilot study was particularly important for the proposed research given the novel use of some of the measures. The author is not aware of existing measures to capture young adults' perceptions of their parents' coping behaviors and suggestions.

### Method

#### Participants

Participants were 24 (58% male) undergraduate students enrolled in an Introductory Psychology course at a large southeastern university during the Fall 2010 semester. Students were all 18 years or older ( $M = 18.71$ ). Students from all ethnicities were eligible to participate (67% European American).

#### Procedure

Approval from the university's institutional review board was obtained prior to data collection. The procedure for this pilot was the same as outlined for the proposed research except that each participant completed the procedure twice, with the second time point occurring approximately one week after the initial assessment ( $M = 7$  days).

### Results

#### Coping

Young adults' self-reported coping strategies were assessed using the COPE. To review, this measure was developed with 14 subscales, which I proposed could be collapsed into three higher-order factors: problem-focused, emotion-focused, and avoidance. Table A reports the number of items comprising the subscales, means, standard deviations, and alphas for each of these scales and the composite categories. Generally, internal consistency was high across the subscales and the higher order factors. There is notably less internal consistency for the avoidance factor, but this is in line with what Carver and colleagues (1989) found across those subscales as well. It is important to note that although internal consistency for the subscales "seeking support through religion" and "alcohol or drug use" were high, their correlations with other subscales did not meet standard conventions, and thus they were dropped from further inclusion into the higher order factor structures. See Table B for intercorrelations amongst the proposed factors. As shown in Table A the three proposed coping categories had good internal consistency. The relationship between problem-focused and emotion-focused factors was positive, as expected, given that they are both, to some degree, approach strategies. The relationship between the problem-focused and avoidance factors was positive but nonsignificant. The correlation between the emotion-focused and avoidance factors was surprisingly high positive, though a positive relationship has been found before (Kliewer and colleagues, 1996) with the authors suggesting that, in some ways, focusing on one's emotions is similar to avoidance in that an individual is not truly attempting to resolve the stressor. Finally, test-retest reliability over a period of one week

was also good, suggesting moderate stability ( $r_s = .74, .57, \text{ and } .56$ ) for problem-focused, emotion-focused, and avoidance coping, respectively).

Table A  
*Number of Items, Means, Standard Deviations, and Internal Consistencies of Young Adults' Self-reported Coping Behaviors at Time 1*

	# of items	<i>M</i>	<i>SD</i>	$\alpha$
Planning	4	3.11	.75	.873
Active	4	2.66	.69	.603
Suppression of Competing Activities	4	2.35	.66	.750
Restraint of Impulsive action	4	2.44	.63	.729
Seek Support: Instrumental	4	2.60	.58	.580
<b>Problem-Focused Strategies</b>		<b>2.63</b>	<b>.46</b>	<b>.729</b>
Positive Reappraisal	4	3.09	.75	.871
Acceptance	4	2.54	.59	.539
Seek Support: Emotional	4	2.56	.77	.743
<b>Emotion-Focused Strategies</b>		<b>2.73</b>	<b>.57</b>	<b>.720</b>
Cognitive Disengagement	4	2.36	.65	.566
Denial	4	1.33	.45	.758
Behavioral Disengagement	4	1.88	.48	.509
Venting	3	2.59	.69	.607
<b>Avoidance Strategies Combined</b>		<b>2.04</b>	<b>.37</b>	<b>.505</b>

Table B  
*Intercorrelations among Young Adults' Self-reported Coping Behaviors at Time 1*

	Emotion-Focused	Avoidance
Problem-Focused	.63**	.19
Support-Seeking		.49*

\*  $p < .05$ ; \*\*  $p < .01$

### Perceptions of Parents' Coping

Young adults' perceptions of their parents' coping was assessed using a revised version of the Ways of Coping scale modified to assess young adults' perceptions of their mother's and father's coping independently. See Table C for means, standard deviations, and internal consistency information. In general, the three proposed coping categories had good internal consistency. [Interestingly, it appears, based on the test-retest data for this measure (see Table E) and the data for the COPE, that there is less inconsistency when reporting others' behaviors compared when participants report about their own. Looking within participants' reports of their parents' coping behaviors, there appears to be less variability in their reports of their mothers compared to their fathers; this may be a result of more exposure to mothers throughout childhood relative to time spent with fathers.] See Table D for the correlations between coping categories, which were reasonable and in expected directions.

Interestingly, the relationships are somewhat different across parents, suggesting that participants are differentiating between their parents. Correlations between young adult's perceptions of the coping strategies of their mother and father demonstrate further differentiation between parents ( $r_s = .78, .32, \text{ and } .44$  for problem-focused, emotion-focused, and avoidance, respectively). There is certainly a good deal of consistency in young adults' perceptions of mothers and fathers use of problem-focused behaviors relative to the consistency of emotion-focused and avoidance strategies across parents. This greater consistency for problem-focused may indicate a real phenomenon in which people who use problem-focused strategies are more apt to select mates who also utilize problem-focused strategies. Table E provides information regarding the stability of the scales over one-week.

Table C

*Number of Items, Means, Standard Deviations, and Internal Consistencies of Young Adults' Perceptions of Parents' Coping Behaviors at Time 1*

	# of items	Mother			Father		
		<i>M</i>	<i>SD</i>	$\alpha$	<i>M</i>	<i>SD</i>	$\alpha$
Problem-focused	23	2.46	.54	.909	2.44	.40	.811
Social support: instrumental	5	2.43	.67	.735	2.14	.58	.629
<b>Problem-Focused</b>	<b>28</b>	<b>2.51</b>	<b>.56</b>	<b>.926</b>	<b>2.38</b>	<b>.39</b>	<b>.860</b>
Emphasizing the positive	6	2.35	.65	.850	2.54	.75	.786
Tension-reduction	6	2.02	.49	.544	1.94	.46	.504
Social support: emotional	3	2.31	.51	.574	2.60	.70	.490
<b>Emotion-Focused</b>	<b>15</b>	<b>2.34</b>	<b>.53</b>	<b>.831</b>	<b>2.17</b>	<b>.41</b>	<b>.717</b>
Wishful thinking	10	2.00	.65	.866	1.88	.45	.731
Self-blame	2	1.73	.71	.718	1.94	.70	.530
Distancing	7	1.88	.44	.661	2.08	.36	.476
Self-isolation	4	2.00	.55	.577	2.14	.58	.579
<b>Avoidance</b>	<b>23</b>	<b>1.94</b>	<b>.41</b>	<b>.834</b>	<b>1.99</b>	<b>.33</b>	<b>.750</b>

Table D

*Intercorrelations among Young Adults' Perceptions of Mothers' and Fathers' Coping Behaviors at Time 1*

	Emotion-Focused		Avoidance	
	Mother	Father	Mother	Father
Problem-Focused	.64**	.52**	.56**	.30
Emotion-Focused			.64**	.64**

\*\*  $p < .01$

Table E  
*Test-retest Reliability Information for Young Adults' Perceptions of Mothers' and Fathers' Coping Behaviors over One Week*

	Mother	Father
Problem-Focused	.88**	.77**
Emotion-Focused	.80**	.78**
Avoidance	.86**	.81**

\*\*  $p < .01$

### **Perceptions of Parents' Coping Suggestions**

Young adults' perceptions of their parents' coping suggestions were assessed using a revised version of Parents Coping Socialization Scale for both mothers and fathers independently. In general, the three proposed coping categories had good internal consistency and the correlations between the categories were reasonable and in expected directions. Only those subscales that had both good internal consistency and acceptable intercorrelations within their a priori category (problem-focused, emotion-focused, and avoidance) were included. As a result, religious coping and nonconstructive coping (e.g., violence towards others) were not included. See Table E for number of items, means, standard deviations, and internal consistency information. Then, see Table F for intercorrelations amongst the broader coping suggestion categories for perceptions of mothers and fathers separately. The correlations between young adults' perceptions of the coping suggestions of their mother and father show little differentiation between parents ( $r_s = .72, .89, \text{ and } .90$  for problem-focused, emotion-focused, and avoidance, respectively). The large correlations between young adults' reports of their parents' coping suggestions may indicate that parents are generally "on the same page" when it comes to the suggestions they give their children even if their behaviors are divergent from one another. Finally, this pilot study also allowed for an examination of the stability of these constructs and analyses revealed adequate stability over one week. See Table G for test-retest information for mothers and fathers separately.

Table F  
*Number of Items, Means, Standard Deviations, and Internal Consistencies of Young Adults' Perceptions of Parents' Coping Suggestions at Time 1*

	# of items	Mother			Father		
		M	SD	$\alpha$	M	SD	$\alpha$
Cognitive Decision Making	5	5.84	1.00	.861	5.98	0.98	.856
Direct Problem Solving	3	5.68	1.15	.866	5.72	1.02	.748
Seeking Understanding	4	5.27	1.19	.781	5.59	1.19	.829
Personal Control	4	5.16	1.22	.832	5.15	1.50	.895
Seek Support: Instrumental	6	4.42	1.41	.877	4.33	1.31	.849
<b>Problem-Focused Suggestions</b>		<b>5.27</b>	<b>.98</b>	<b>.892</b>	<b>5.35</b>	<b>1.00</b>	<b>.897</b>
Optimism	4	5.19	1.43	.844	4.90	1.47	.903
Positivity	4	5.17	1.19	.728	5.08	1.39	.788
Acceptance	1	3.46	1.89	--	3.13	1.73	--
Seek Support: Emotional	6	4.37	1.45	.866	4.33	1.34	.874
<b>Emotion-Focused Suggestions</b>		<b>4.91</b>	<b>1.16</b>	<b>.878</b>	<b>4.77</b>	<b>1.14</b>	<b>.868</b>
Cognitive Disengagement	4	3.42	1.55	.893	2.97	1.22	.711
Wishful Thinking	4	3.13	1.29	.675	3.07	1.20	.668
Behavioral Disengagement	3	4.01	1.28	.583	4.21	1.28	.557
Distracting Actions	8	3.44	1.50	.920	3.54	1.41	.910
<b>Avoidance Suggestions</b>		<b>3.33</b>	<b>1.00</b>	<b>.650</b>	<b>3.50</b>	<b>0.98</b>	<b>.722</b>

Table G  
*Intercorrelations among Young Adults' Perceptions of Mothers' and Fathers' Coping Suggestions at Time 1*

	Emotion-Focused		Avoidance	
	Mother	Father	Mother	Father
Problem-Focused	.77**	.78**	.30	.57**
Emotion-Focused			.65**	.74**

\*\*  $p < .01$

Table H

*Test-retest Reliability Information for Young Adults' Perceptions of Mothers' and Fathers' Coping Suggestions over One Week*

	Mother	Father
Problem-Focused	.96**	.78**
Emotion-Focused	.95**	.77**
Avoidance	.84**	.79**

\*\*  $p < .01$

### Young Adults' Schemas about Their Parents

The FAARS coding scheme was used to assess participants' relationship schemas from a 5-minute open-ended narrative regarding their mother and father separately in terms of both criticism and warmth. See Table I for information regarding means, standard deviations and internal consistencies. Intercorrelations between the criticism and warmth factors were in expected directions indicating that they are in fact assessing polar constructs ( $r_s = -.46$  and  $-.57$  for mother and father schemas, respectively). Correlations between young adults' feelings about their mother and father revealed little consistency for conflict ( $r = .10$ ), but more agreement with regards to warmth ( $r = .67$ ), indicating perhaps that feelings of warmth may generalize across parents, but that critical feelings are more person-specific. Finally, see Table J for information about construct stability over one week. The test-retest analyses suggest that feelings of warmth are equally stable across parents, but critical feelings are less stable about mothers and highly stable about fathers.

Table I

*Number of Items, Means, Standard Deviations, and Internal Consistencies of Young Adults' Schemas about Their Parents at Time 1*

	# of items	Mother			Father		
		<i>M</i>	SD	$\alpha$	<i>M</i>	SD	$\alpha$
Criticism	6	1.35	0.56	.612	1.65	0.98	.774
Warmth	6	4.80	1.55	.858	4.51	1.67	.842

Table J

*Test-retest Reliability Information for Young Adults' Schemas about Their Parents over One Week.*

	Mother	Father
Criticism	.51**	.88**
Warmth	.60**	.63**

\*\*  $p < .01$

## Appendix B

### Family Affective Attitude Rating Scale (FAARS; Bullock, Schneiger, & Dishion, 2005)

Coder ratings are derived from the content of the entire audio taped FMSS. Listen to the entire tape once to get the global impression (the more you listen the less global you will be). You may listen to the entire speech sample again if needed. Though you may take notes as you listen, it is essential that ratings reflect global impressions and do not solely depend upon discrete pieces of information.

Ratings are based on both content and tone for the entire speech sample regardless of the sample's duration but no longer than 5 minutes. Listen for content and tone together for the entire speech sample making particular note of the overall tenor of the respondent's report. Items may be double coded in different sections (See descriptions of ratings for greater detail).

Ratings of positive or negative behaviors or attributes are not mutually exclusive, i.e. individuals may be rated high or low on both positive and negative items or scales. It is essential that raters do not make inferences or assumptions regarding the respondent's statements or their motivation. Codes must reflect only substantive information that is contained within the speech sample. Coders should not make interpretations regarding respondent's statements or intent. Inferences or interpretations regarding respondent's samples are a serious threat to coder reliability. For example, a coder may infer that a respondent loves or cares about the target person, but this can only be rated as an example in the presence of an explicit statement by the respondent.

Pay particular attention to qualifying statements and sarcasm. Statements (either critical or positive) in which a qualifier (typically 'but') is used should be considered neutral. Neutral statements are ambiguous in that they provide neither positive nor negative concrete information regardless of content or their contributes to the global impression of the speech sample (e.g. "He's a good student, but he really gets in trouble a lot at school.") Neutral statements cannot be rated as clear examples for any ratings. Positive statements embedded in the absence of a negative (e.g. "He's not that bad." or "She never causes me grief.") are also considered to be neutral statements.

Speech sample ratings must focus on current attributions or behaviors only. Historical information should not be rated unless the respondent specifically indicates that the behavior being described is current or ongoing. It is also important to disregard general narratives by the respondent that do not specifically relate or link directly to the target person (e.g. "Teenagers these days are such trouble makers.") Respondent reports of how other people view the target are also not rated (e.g. "His teachers say he is a great student").

Coding should always be conservative. Clear or concrete examples are indicated only when there is absolutely no doubt that the respondent's account provides unambiguous evidence of a particular behavior or attribute. If it doesn't hit you over the head as a 'concrete' example, it probably isn't. It also should be noted that each speech sample should



be treated as a unique and respondent-specific. Coders should not compare individuals' speech samples when rating the FMSS. With the exception of items in the "Respondent Attributes and Characteristics of the Speech Sample" items, all ratings are made on a 9 point ordinal rating scale.

This coding system is based on global impressions. Ratings are based on the content in the entire FMSS. Coders should not be strongly influenced by 1 concrete example if the remainder of the sample contradicts that example.

The following represents a guideline for scoring:

- "1" no evidence for the duration of the speech sample
- "2-3" some indication of item being coded, but no concrete evidence
- "3-4" one or more weak examples
- "5" one concrete, unambiguous, unqualified example, or 3 or more weak examples of the same behavior or attribute in consecutive statements (such that the speech sample as a whole provides evidence, albeit weak for the item being rated).
- "6-8" must include at least one concrete example and one or more weak examples of a particular behavior or attribute. Items are scored in the 6-8 range to the extent that there are multiple weak examples, or global coder impressions of this behavior or attribute in addition to the one concrete example.
- "9" two or more concrete, unambiguous examples of a particular behavior or attribute.



## Appendix C: Study Measures

## COPE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what *you* generally do and feel, when *you* experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you *usually* do when you are under a lot of stress.

When completing this questionnaire, you should treat each question separately from every other question. There are no right or wrong answers for the questions, so please indicate what *you* do rather than what “most people” do.

		I usually don't do this at all	I usually do this a little bit	I usually do this a medium amount	I usually do this a lot
1	I think hard about what steps to take.				
2	I turn to work or other substitute activities to take my mind off things.				
3	I ask people who have had similar experiences what they did.				
4	I sleep more than usual.				
5	I put my trust in God.				
6	I make sure not to make matters worse by acting too soon.				
7	I make a plan of action.				
8	I force myself to wait for the right time to do something.				
9	I think about how I might best handle the problem.				
10	I try to see it in a different light, to make it seem more positive.				
11	I refuse to believe that it has happened.				
12	I keep myself from getting distracted by other thoughts or activities.				

		I usually don't do this at all	I usually do this a little bit	I usually do this a medium amount	I usually do this a lot
13	I try hard to prevent other things from interfering with my efforts at dealing with this.				
14	I say to myself "this isn't real."				
15	I hold off doing anything about it until the situation permits.				
16	I put aside other activities in order to concentrate on this.				
17	I give up the attempt to get what I want.				
18	I let my feelings out.				
19	I get upset, and am really aware of it.				
20	I try to get advice from someone about what to do.				
21	I reduce the amount of effort I'm putting into solving the problem.				
22	I talk to someone who could do something concrete about the problem.				
23	I get upset and let my emotions out.				
24	I try to get emotional support from friends or relatives.				
25	I drink alcohol or take drugs, in order to think about it less.				
26	I try to come up with a strategy about what to do.				
27	I learn something from the experience.				
28	I restrain myself from doing anything too quickly.				
29	I take additional action to try to get rid of the problem.				
30	I accept that this has happened and that it can't be changed.				

		I usually don't do this at all	I usually do this a little bit	I usually do this a medium amount	I usually do this a lot
31	I just give up trying to reach my goal.				
32	I discuss my feelings with someone.				
33	I pretend that it hasn't really happened.				
34	I do what has to be done, one step at a time.				
35	I pray more than usual.				
36	I take direct action to get around the problem.				
37	I seek God's help.				
38	I accept the reality of the fact that it happened.				
39	I learn to live with it.				
40	I admit to myself that I can't deal with it, and quit trying.				
41	I try to grow as a person as a result of the experience.				
42	I look for something good in what is happening.				
43	I get used to the idea that it happened.				
44	I act as though it hasn't even happened.				
45	I talk to someone about how I feel.				
46	I concentrate my efforts on doing something about it.				
47	I go to movies or watch TV, to think about it less.				
48	I try to find comfort in my religion.				
49	I focus on dealing with this problem, and if necessary let other things slide a little.				
50	I get sympathy and understanding from someone.				

		I usually don't do this at all	I usually do this a little bit	I usually do this a medium amount	I usually do this a lot
51	I daydream about things other than this.				
52	I talk to someone to find out more about the situation.				
53	I feel a lot of emotional distress and I find myself expressing those feelings a lot.				

**Ways of Coping (Revised)**  
*Mother Version*

Think about your mother's experiences with *life stress*— for example, difficulty at work, an argument with your father, etc.. Please read each item below and indicate, according to the below scale, to what extent you believe your mother used each strategy throughout your life, including now, to deal with life stress.

0 = not used      1 = used somewhat      2 = used quite a bit      3 = used a great deal

1. She just concentrates on what she has to do next – the next step. \_\_\_\_\_
2. She tries to analyze the problem in order to understand it better. \_\_\_\_\_
3. She turns to work or substitute activity to take her mind off things. \_\_\_\_\_
4. She feels that time will make a difference – the only thing to do is to wait. \_\_\_\_\_
5. She bargains or compromises to get something positive from the situation. \_\_\_\_\_
6. She does something which she doesn't think will work, but at least she is doing something. \_\_\_\_\_
7. She tries to get the person responsible to change his or her mind. \_\_\_\_\_
8. She talks to someone to find out more about the situation. \_\_\_\_\_
9. She criticizes or lectures herself. \_\_\_\_\_
10. She tries not to burn her bridges, but leave things open somewhat. \_\_\_\_\_
11. She hopes a miracle will happen. \_\_\_\_\_
12. She goes along with fate; sometimes she just has bad luck. \_\_\_\_\_
13. She goes on as if nothing has happened. \_\_\_\_\_
14. She tries to keep her feelings to herself. \_\_\_\_\_
15. She looks for the silver lining, so to speak; tries to look on the bright side of things. \_\_\_\_\_
16. She sleeps more than usual. \_\_\_\_\_
17. She expresses anger to the person(s) who caused the problem. \_\_\_\_\_
18. She accepts sympathy and understanding from others. \_\_\_\_\_
19. She tells herself things that help her to feel better. \_\_\_\_\_
20. She is inspired to do something creative. \_\_\_\_\_
21. She tries to forget the whole thing. \_\_\_\_\_
22. She gets professional help. \_\_\_\_\_
23. She changes or grows as a person in a good way. \_\_\_\_\_
24. She waits to see what will happen before doing anything. \_\_\_\_\_
25. She apologizes or does something to make up. \_\_\_\_\_
26. She makes a plan of action and follows it. \_\_\_\_\_
27. She accepts the next best thing to what she wanted. \_\_\_\_\_
28. She lets her feelings out somehow. \_\_\_\_\_

29. She realizes she brought the problem on herself. \_\_\_\_
30. She comes out of the experience better than she went in. \_\_\_\_
31. She talks to someone who can do something concrete about the problem. \_\_\_\_
32. She gets away from it for a while; tries to rest or take a vacation. \_\_\_\_
33. She tries to make herself feel better by eating, drinking, smoking, using drugs or medication, etc. \_\_\_\_
34. She takes a big chance or does something very risky. \_\_\_\_
35. She tries not to act too hastily or follow her first hunch. \_\_\_\_
36. She finds new faith. \_\_\_\_
37. She maintains her pride and keeps a stiff upper lip. \_\_\_\_
38. She rediscovers what is important in life. \_\_\_\_
39. She changes something so things will turn out all right. \_\_\_\_
40. She avoids being with people in general. \_\_\_\_
41. She doesn't let it get to her; refuses to think too much about it. \_\_\_\_
42. She asks a relative or friend she respects for advice. \_\_\_\_
43. She keeps others from knowing how bad things are. \_\_\_\_
44. She makes light of the situation; refuses to get too serious about it. \_\_\_\_
45. She talks to someone about how she is feeling. \_\_\_\_
46. She stands her ground and fights for what she wants. \_\_\_\_
47. She takes it out on other people. \_\_\_\_
48. She draws on her past experiences; she has been in a similar situation before. \_\_\_\_
49. She knows what has to be done, so she doubles her efforts to make things work. \_\_\_\_
50. She refuses to believe that it has happened. \_\_\_\_
51. She makes a promise to herself that things will be different next time. \_\_\_\_
52. She comes up with a couple of different solutions to the problem. \_\_\_\_
53. She accepts it, since nothing could be done. \_\_\_\_
54. She tries to keep her feelings from interfering with other things too much. \_\_\_\_
55. She wishes that she can change what has happened or how she feels. \_\_\_\_
56. She changes something about herself. \_\_\_\_
57. She daydreams or imagines a better time or place than the one she is in. \_\_\_\_
58. She wishes that the situation would go away or somehow be over with. \_\_\_\_
59. She has fantasies or wishes about how things might turn out. \_\_\_\_
60. She prays. \_\_\_\_
61. She prepares herself for the worst. \_\_\_\_
62. She goes over in her mind what she will say or do. \_\_\_\_
63. She thinks about how a person she admires would handle this situation and uses that as a model. \_\_\_\_
64. She tries to see things from the other person's point of view. \_\_\_\_
65. She reminds herself how much worse things could be. \_\_\_\_
66. She jogs or exercises. \_\_\_\_











## Demographics

1. What is the month, day, and year of your birth?

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
 Month            Day            Year

2. Age: \_\_\_\_\_

3. Gender: \_\_\_\_\_

4. How would you describe your ethnic background? \_\_\_\_\_  
 (e.g., African American, Hispanic, European American, etc.)

5. Mother's age: \_\_\_\_\_

5a. she is your (circle one):    biological mother    stepmother  
 other: \_\_\_\_\_

6. Father's age: \_\_\_\_\_

6a. he is your (circle one):    biological father    stepfather  
 other: \_\_\_\_\_

7. When you were considering your responses to questions about your **mother**, was there a particular time in your life that you referenced?  
 a. 0-3 years old    b. 4-9 years old    c. 10-13 years old    d. 14-16 years old  
 e. 18 years old to present    f. average across lifetime

8. When you were considering your responses to questions about your **father**, was there a particular time in your life that you referenced?  
 a. 0-3 years old    b. 4-9 years old    c. 10-13 years old    d. 14-16 years old  
 e. 18 years old to present    f. average across lifetime

9. What is your marital status? (Please circle only one)

- a. Single  
 b. Married  
 c. Divorced /Separated  
 d. Widow  
 e. Living Together

10. # months/years living away from your parents: \_\_\_\_\_ months \_\_\_\_\_ years
11. Are you presently: (circle all that apply)
- Employed full-time
  - Employed part-time
  - Not employed, but seeking work
  - Not employed, not seeing work
  - Full-time student
  - Part-time student
  - Never employed
  - If you are working, what is your current job title?  
\_\_\_\_\_
12. With regards to your parents marital status, *please circle all that apply*:
- Your mother and father are married to one another
  - Your mother and father are separated/divorced from one another
  - Your mother is married to someone other than your father
  - Your father is married to someone other than your mother
  - Your mother is deceased
  - Your father is deceased
13. *If your parents do not live together*, whose home did you spend the majority of your time in?
- Mother's home
  - Father's home
  - 50/50 split
14. When you were a child, how much time did you spend with your...
- mother in a given week?
    - \_\_\_\_\_ hours
  - father in a given week?
    - \_\_\_\_\_ hours
15. During a given week, how often do you speak with your...
- mother?
    - \_\_\_\_\_ times
  - father?
    - \_\_\_\_\_ times

16. Which of the following best describes the area where you were raised during most of your childhood?
- Rural
  - Small town
  - Medium-sized town
  - Suburbs
  - City
  - Moved around
17. How many times during your childhood did you move to a totally new neighborhood or town? (If none, enter "0")  
\_\_\_\_\_ # Times
18. The zip code where you spent most of your childhood: \_\_\_\_\_
19. When you were growing up, was your family better or worse off financially than the average family was at that time? (If your parents lived separately and had different financial situations, answer for the family you lived with for the longest time.)
- A lot better off
  - Somewhat better off
  - A little better off
  - Same as average family
  - A little worse off
  - Somewhat worse off
  - A lot worse off
20. What is your mother's highest level of education (circle one)
- No degree
  - High school diploma/GED
  - Some college, no diploma
  - Associates degree
  - Bachelor's degree
  - Some graduate school, no degree
  - M.S./M.A./J.D./ etc.
  - M.D.
  - Ph.D.

21. What is your father's highest level of education (circle one)
- a. No degree
  - b. High school diploma/GED
  - c. Some college, no diploma
  - d. Associates degree
  - e. Bachelor's degree
  - f. Some graduate school, no degree
  - g. M.S./M.A./J.D./ etc.
  - h. M.D.
  - i. Ph.D.
22. How important was religion in your home when you were growing up?
- a. Very important
  - b. Somewhat important
  - c. Not very important
  - d. Not at all important
23. How many regular chores did you have during the time you were growing up?
- a. A lot
  - b. Some
  - c. A little
  - d. None
24. How many rules did you have about how to spend your time?
- a. A lot
  - b. Some
  - c. A little
  - d. None