

PARENT EMOTION COACHING AND ADOLESCENT ADJUSTMENT

Ruth Katherine Smith

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Approved by:

Andrea Hussong

Deborah J. Jones

Melissa Lippold

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## **ABSTRACT**

Ruth Katherine Smith: Parent emotion coaching and adolescent adjustment  
(Under the direction of Andrea Hussong)

The current study took a novel approach to examining the parent emotion socialization (PES) construct of emotion coaching by aligning these behaviors along characteristics of warm validation (unstructured emotion coaching; UEC) and active problem solving (structured emotion coaching; SEC). The study utilized experience sampling methodology and an observational coding scheme to examine the impact of UEC and SEC behaviors on adolescent outcomes in 65 parent-adolescent dyads. Disaggregating the emotion coaching construct proved useful for more nuanced prediction of adolescent emotion regulation, internalizing and externalizing symptoms. Results showed that UEC and SEC were uncorrelated, independent components of emotion coaching PES. Higher UEC was the sole predictor of fewer adolescent reports of internalizing symptoms, whereas SEC predicted fewer parent reports of adolescent externalizing symptoms. Additionally, emotion regulation mediated the relationship between higher SEC and fewer adolescent reports of internalizing and externalizing symptoms. Potential implications of these findings and future directions are considered.

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## Parent Emotion Coaching and Adolescent Adjustment

Children's abilities to exercise control over their emotions, particularly negative emotions, is a skill that develops throughout childhood, adolescence and young adulthood and an inability to adequately form such emotion regulation skills can contribute to difficulties in areas such as social competence and school performance, internalizing and externalizing symptoms, and prosocial behavior (Eisenberg et al., 2001; Eisenberg & Fabes, 2006; Eisenberg & Morris, 2002). Parenting practices appear to play a primary role in supporting or compromising the acquisition of effective emotion regulation skills (Morris, Silk, Steinberg, Myers, & Robinson, 2007). Multiple parenting practices impact how children develop skills to regulate their emotions (Gottman et al., 1997) and there has been a growing body of research focused on how parents socialize their children around emotions. However, few studies examine the specific mechanisms that relate parents' emotion socialization behaviors to adolescent outcomes. Parent emotion socialization (PES), or how parents socialize their children around emotions, involves a set of specific parenting practices targeting the development of children's emotional competence, a repertoire of emotion-related skills that is inclusive of emotion regulation (Halberstadt, Denham, & Dunsmore, 2001; Mayer & Salovey, 2004; Saarni, 1999). PES theory is a particularly relevant framework for considering the development of emotion regulation and adjustment outcomes in adolescents.

Whereas substantial evidence has linked PES styles and practices to poor emotion regulation strategies in children (Eisenberg & Fabes, 2006; Eisenberg, Fabes, Carlo, & Karbon,



1992; Eisenberg, Fabes, & Murphy, 1996; Gottman et al., 1997), little research has focused on the impact of these practices in adolescents (Hersh & Hussong, 2009; Morris et al. 2007). During adolescence changes in brain structure and function occur in regions that are key to the regulation of emotion (Steinberg, 2005 for review; Thompson, 1994) making this developmental period an imperative time for studying change in emotional functioning. In general, adolescence is a period marked by unique stressors and greater emotional volatility, including higher frequency and intensity of emotions, than that seen in childhood or adulthood (Larson, Csikszentmihalyi, & Graef, 1980; Larson & Lampman-Petratis, 1989; Williams & McGillicuddy-De Lisi, 1999). The transition to high school may be a particular time in which academic and personal stressors coincide to impact personal and interpersonal functioning (Barber & Olsen, 2004; Seidman, Aber, Allen, & French, 1996). The current study enhances our understanding of the relation between PES and adolescent adjustment behaviors by unpacking the forms of PES that may best promote effective emotion regulation and related decreases in internalizing and externalizing symptomatology among teens transitioning to high school.

### *Parent Emotion Socialization*

There have been a variety of approaches to conceptualizing the parent-child relationship, as seen in the literature on attachment, parenting styles and specific parenting practices (Baumrind, 1989; Gray & Steinberg, 1999; Steinberg, 1990; Steinberg, Lamborn, Dornbusch, & Darling, 1992). PES is a relatively recent approach to examining the parent-child relationship. Its underlying constructs can be conceptualized as being rooted in the preceding parenting literature, however, unlike prior formulations it focuses specifically on how parents regulate their own and their child's negative emotions (Cowan & Cowan, 2002). Approaches to conceptualizing PES have included typological views of parenting behaviors, that examine parenting styles as broad

dimensions where parent attitudes and beliefs shape the emotional climate of the parent-child relationship (e.g. whether a parent exudes relatively more warmth or control). Alternatively, other approaches to conceptualizing PES have included dimensional views that focus on more specific parenting practices, such as socialization behaviors, that may then be tied more directly to specific child outcomes (Cowan & Cowan, 2002).

One approach is that taken by Gottman and colleagues (1997). In their theory about parent meta-emotion philosophy they proposed a supportive PES typology termed emotion coaching and a non-supportive PES typology termed emotion dismissing. Emotion-coaching parents are described as being aware and accepting of their children's emotions and responding to their children's emotions in a supportive manner with an aim to validate, teach, and problem solve. Emotion-dismissing parents are described as viewing their children's expressions of negative emotions as inappropriate and a nuisance and these parents often trivialize emotional expression. In work with school-aged children, these supportive and non-supportive PES behaviors have demonstrated implications for how children experience and express their emotions and how they fare in other domains of functioning (Eisenberg et al., 1998; Gottman et al., 1997).

In a parallel line of research, Eisenberg and colleagues (1998) conceptualized parent reactions to children's distress as a set of dimensional parenting behaviors, with some dimensions reflecting more supportive approaches (such as providing validation, empathy, and help problem solving) and others reflecting more non-supportive dimensions (such as discouraging children's expression of emotions). This approach parallels Gottman and colleagues emotion coaching and emotion dismissing typologies. Moreover, Eisenberg et al. posited that parents who display supportive reactions to their children's emotional expression

facilitate better emotion-related outcomes in their children by conveying that variability in emotional expression, including the experience of negative emotions, is acceptable and understood. Alternatively, parents who display non-supportive reactions to their children's emotional expressivity are hypothesized to influence the way that children come to interpret their and other's negative emotions, which may in turn contribute to avoidance of uncomfortable emotional experiences and thus prevent children from taking the opportunity to learn from subsequent experiences of negative affect. Though different in their foci on PES as being a molar (Gottman et al., 1997) versus molecular construct (Eisenberg et al., 1998), these approaches share an emphasis of PES behaviors that are supportive of children's emotional expressivity as being predictive of more positive adjustment and PES behaviors that are unsupportive as being predictive of more negative adjustment (Eisenberg et al., 1998; Gottman et al., 1997).

Taking a dimensional approach to conceptualizing PES may be more informative, as this approach identifies core sets of skills that can be categorized in terms of direct mechanisms (Saarni, 1999) reflected in specific parent responses to children's distress (Eisenberg et al., 1998). Although an understanding of broad parenting styles is important, it is the understanding of specific parenting practices that allows for a more precise mapping of parenting behaviors onto child outcomes. Indeed, parenting styles are thought to have an indirect effect on child outcomes via specific parenting practices (Darling & Steinberg, 1993). In the case of parent emotion socialization, examining how parents react to children's emotions through their emotion-related discussions is a useful tool for learning the way that these behaviors impact child outcomes.

### *Empirical support for PES distinctions*

Empirical support has demonstrated the impact that both supportive and non-supportive parenting practices can have on children's emotional functioning. Parental minimization of children's emotions has been linked with the use of less constructive and more avoidant emotion regulatory strategies by children in early and middle childhood (Eisenberg, Fabes, Carlo, & Karbon, 1992; Eisenberg, Fabes, & Murphy, 1996). Conversely, supportive reactions to children's negative emotions in middle childhood have been positively associated with social skills, ability to cope with negative emotions and emotion regulation ability (Eisenberg, Fabes, & Murphy, 1996).

Empirical studies that more specifically examined the emotion coaching and emotion dismissing parenting types have also revealed implications for emotional functioning and emotion related adjustment indicators in childhood. Specifically, parents high in emotion coaching are less rejecting and provide more scaffolding and praise to their children, resulting in children having fewer behavior problems, greater ability to focus attention, less negative interactions with peers, less physical illness, and higher academic achievement (Eisenberg et al., 1998; e.g. Brophy-Herb, Stansbury, Bocknek, & Horodynski, 2012; Gottman et al., 1997; Shipman et al., 2007). Gottman and colleagues (1996, 1997) reported that parents who were more validating of their children's negative emotions and who engaged in more coaching behaviors had children who were better able to regulate their emotions and who went on to have fewer depressive symptoms in early adolescence.

Though a small number of studies have examined the impact of PES in adolescence, these studies have generally shown findings of lower emotion coaching and higher emotion dismissing PES behaviors predicting greater internalizing and externalizing difficulties

(Bronstein, Briones, Brooks, & Cowan, 1996; Garside & Klimes-Dougan, 2002; Katz, 1997; Shortt, Sheeber, Low, & Katz, 2010; Shortt, Smith, and Stoolmiller, 2006). However, a study by Stocker, Richmond, Rhoades, and Kiang (2007) demonstrated findings that were incongruent with this trend. They found that parent coaching behaviors were significantly and negatively associated with internalizing symptoms in adolescence but not significantly associated with externalizing symptoms. Also, a study by Katz and Hunter (2007) found that whereas maternal emotion coaching behaviors were predictive of less internalizing symptoms in adolescence (and unassociated with externalizing symptoms), neither maternal awareness nor acceptance of adolescent emotion was found to be predictive of adjustment, despite theory indicating that these parenting behaviors are essential components of supportive parenting (Eisenberg et al., 1998; Gottman et al., 1997). Thus, findings in adolescence appear to demonstrate a trend of emotion coaching parenting behaviors being associated with positive adjustment outcomes and emotion dismissing behaviors being associated with negative adjustment outcomes, however, there has been a lack of consistency in the findings with regards to the specific adjustment outcomes emotion coaching behaviors are shown to impact.

#### *Emotion regulation as a mediator between PES and adjustment*

Emotion regulation may represent a primary mechanism for how emotion coaching PES behaviors take their effects on adolescent outcomes. Indeed, parents have been shown to play an imperative role in shaping their children's ability to effectively regulate emotions (Eisenberg et al., 1998; Gottman et al., 1997; Halberstadt, 1991; Halberstadt et al., 2001; Mayer & Salovey, 2004; Morris, Silk, Steinberg, Myers, & Robinson, 2007; Saarni, 1999), thus examining PES behaviors may be instrumental for understanding the acquisition of emotion regulation.

Emotion regulation deficits have been implicated in many types of adolescent psychopathology including internalizing disorders, that are characterized as difficulty with down-regulating negative emotions and up-regulating and maintaining positive emotions, as well as externalizing disorders, that are characterized as difficulty with regulating behaviors but are also theorized to involve dysregulated affect (Bradley, 2000; Cole, Michel, & Teti, 1994; Herts, McLaughlin, & Hatzenbuehler, 2012; McLaughlin, Hatzenbuehler, Mennin, & Nolen-Hoeksema, 2011; Silk, Steinberg, & Morris, 2003; Southam-Gerow & Kendall 2000). Emotion regulation is a multifaceted construct with many different definitions and empirical operationalizations (Cole, Martin, & Dennis, 2004; Eisenberg & Fabes, 2006; Thompson, 1994; Thompson & Goodman, 2010). Most definitions of emotion regulation generally emphasize either intrinsic aspects of regulation, centering around self-regulatory efforts, or extrinsic aspects of regulation, centering around the influences of external stimuli, such as interpersonal interactions, on one's regulation (Thompson, 2011). Building on past research, Eisenberg and Spinrad (2004) proposed a definition of emotion regulation that is inclusive of both intrinsic and extrinsic characteristics. Their definition, incorporated in the current study, states that emotion regulation is “the process of initiating, avoiding, maintaining, or modulating the occurrence, form, intensity, or duration of internal feeling states, emotion-related physiological, attentional processes, motivational states, and/or the behavioral concomitants of emotion in the service of accomplishing affect-related biological or social adaptation or achieving individual goals” (p. 338). Inherent to this definition is that emotion regulation can also affect the temporal features of an emotional response. The temporal features of emotions are important indicators of emotion regulation to consider given that affective psychopathology is not just characterized by the presence of negative affect but also by the intensity, persistence or lability of negative emotions (Thompson, 2011).

Although we recognize the impact that parents have on their children's emotional development, little research examines how parenting behaviors impact emotion regulation in adolescents (Morris et al., 2007). Indeed, parents continue to have an importance influence on their children throughout adolescence (Steinberg, 2001; Klimes-Dougan et al. 2007). Despite adolescents gaining more independence, growing in their self-regulatory capacities, and shifting towards more peer-focused relations, parents have still been shown to have a profound impact on adolescent adjustment, perhaps including their ability to regulate emotion (Barrera & Garrison-Jones, 1992; Barrera & Li, 1996; McFarlane, Bellissimo, Norman, & Lange, 1994; Young, Berenson, Cohen, & Garcia, 2005).

Research examining the association between PES behaviors and adjustment and the mediating role of emotion regulation have shown variable findings in studies of both children and adolescents. While there have been findings in studies of children demonstrating that emotion regulation mediates the impact of PES on psychosocial adjustment, others have not supported such a mediational effect. Findings from studies hypothesizing a mediating effect of emotion regulation have varied, with some demonstrating no direct benefits of emotion coaching on emotion regulation, to others showing emotion coaching directly impacting externalizing symptoms but not internalizing symptoms nor emotion regulation, and others showing specific components of emotion coaching (e.g. acceptance) relating to less child aggression via emotion regulation (Dunsmore, Booker, & Ollendick, 2013; Gottman, 1996; Ramsden & Hubbard 2002; Lunkenheimer, Shields, & Cortina, 2007).

Studies examining this question in early adolescence are few in number and have demonstrated similar inconsistencies with some suggesting that emotion regulation may mediate the effect of emotion coaching parenting behaviors on adjustment outcomes. Shortt and

colleagues (2010), in a study of ten to thirteen year-olds, found that emotion coaching was indirectly related to fewer externalizing behaviors via better anger regulation, and Cunningham and colleagues (2009), in a study of nine to thirteen year olds, found that emotion coaching predicted later internalizing and externalizing behaviors via better emotion regulation in boys though not in girls.

Taken together, there is empirical support across studies of PES behaviors illustrating that there is a distinction between emotion dismissing and emotion coaching behaviors, that both have an impact on adolescent outcomes, and that emotion regulation may mediate these relationships. Furthermore, although the negative impact of parent's emotion dismissing behaviors on emotion regulation and other adjustment outcomes has been consistently demonstrated in the literature, the picture with regards to emotion coaching behaviors has been less clear. Studies of the impact of emotion coaching PES behaviors on adjustment outcomes have demonstrated positive and negative indirect effects via emotion regulatory ability, with some studies showing no mediation effects. Thus, although emotion coaching PES behaviors have commonly been posited as having positive effects on adolescent outcomes, there appears to be reason to consider factors that may account for inconsistency in findings.

#### *Limitations of research on emotion coaching PES behaviors*

The inconsistency in findings regarding the impact of emotion coaching PES behaviors on emotion regulation and adjustment outcomes may be attributable to the methods used to define and measure emotion coaching behaviors. First, a majority of studies have used an interview aimed at understanding the parent's meta-emotion philosophy that is later coded for coaching and dismissing PES behaviors (Cunningham, Kliwer, & Garner, 2009; Katz & Hunter, 2007; Ramsden & Hubbard, 2002; Shortt, Sheeber, Low, & Katz, 2010; Shortt, Smith, and



Stoolmiller, 2006; Stocker, Richmond, Rhoades, & Kiang, 2007), although a few studies measure PES behaviors by coding parent-child interactions (Ellis, Alisic, Reiss, Dishion, & Fisher, 2013; Hersh & Hussong, 2009; Lunkenheimer, Shields, & Cortina, 2007). Whereas an interview is useful for gaining an understanding of the overall picture of parenting style, using an objective observer to directly measure specific parenting behaviors representative of emotion coaching practices may prove more useful for elucidating how parents actually implement target parenting behaviors.

Second, use of interviews may underlie inconsistencies in findings due to relying on parent self-report of their parenting behaviors. Parents may inadvertently engage in behaviors and report ways they think they are behaving rather than reporting on actual behaviors. As such, parent reports may represent idiographic definitions of parenting behavior as opposed to nomothetic definitions as would be garnered by an objective observer (Aspland & Gardner, 2003; Eddy, Dishion, & Stoolmiller, 1998; Fivush, 1998). Relying on these self reports can result in biases that may vary from sample to sample.

An alternative approach to examining PES is to use observational research, which is considered to be the gold standard for measuring parents' responses to their children's emotions (Zeman, Klimes-Dougan, Cassano, & Adrian, 2007). Observational assessment of behavior allows for a more objective and context-specific way of considering phenomena by providing an opportunity to observe parent-adolescent interactional processes in real-time with care given to the task, setting and duration of observations (i.e., balancing objective measurement while increasing ecological validity; Aspland & Gardner, 2003). Furthermore, coding recorded interactions reduces reporter bias, the influence that intrapersonal variables can have on perceptions of particular parenting behaviors and the risk of discrepant information when relying

on reports about parenting behaviors from multiple informants (Barrera & Li, 1996; Sagrestano, Paikoff, Holmbeck, & Fendrich, 2003; e.g., Tein, Roosa, & Michaels, 1994; Welsh, Galliher, & Powers, 1998).

Third, another limitation of prior studies is that measures of emotion coaching behaviors combine and equate what may actually be two different coaching styles. Gottman and colleagues (1997) theorized that emotion coaching parents provide structure for how their children handle their emotions in that these parents are more goal-oriented, responsive, and instructive in reaction to their children's emotions. They also proposed that emotion coaching differs from a less structured approach in which parents may show empathy and stress the importance of allowing their children freedom of emotional expression without providing their children with a framework and clear lessons in how to handle their emotional experiences. Thus, an emotion coaching style that provides primarily warmth and validation may provide needed support in some regards; however, structure and guidance are also necessary. Moreover, an emotion coaching style marked primarily by teaching, structure and guidance, may appear like emotion dismissing parenting to an adolescent in the absence of the warmth and validation dimensions of emotion coaching PES. Effective emotion coaching styles may indeed contain two dimensions, warmth and structure, that parallel those seen in the general parenting literature and have been shown to contribute to healthy outcomes in children (Baumrind, 1989; Gray & Steinberg, 1999; Steinberg, 1990; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Reconsidering the emotion coaching construct in this manner may account for the inconsistencies in the predictive nature of these PES behaviors.

Disaggregating the emotion coaching construct along dimensions of warmth and structure is similar to what has been done with the typological approach to parenting behavior seen in the

work of the Diana Baumrind (1967). In this work, four parenting prototypes (authoritative, authoritarian, permissive, and rejecting-neglecting) have shown different associations with positive and negative outcomes in children. Most noted is that authoritative parenting tends to be associated with positive outcomes and authoritarian parenting places adolescents at risk for a variety of internalizing and externalizing problems (Baumrind, 1967; Steinberg, 2001). Efforts to disaggregate these parenting types into dimensions (Gray & Steinberg, 1999; Steinberg, 1990; Steinberg, Lamborn, Dornbusch, & Darling, 1992) lead to the identification of component parts of authoritative parenting (acceptance, behavioral control, and psychological control) that appeared to have differential impact on various adolescent outcomes pertaining to academic performance and internalizing and externalizing symptomatology (Gray & Steinberg, 1999; Steinberg et al., 1992). Thus, considering parenting behaviors as typologies and dimensions are not novel approaches within parenting research and they can be applied to examining PES behaviors. Baumrind (1989), in considering the components of the authoritative parenting style, demonstrated that a balance between warmth and appropriate control was protective for children. These parents are described in a manner relevant to emotion coaching dimensions in that authoritative parents are parents who are “warm, supportive, communicative, and responsive to their children's needs, and who exert firm, consistent, and reasonable control and close supervision" (Hetherington & Elmore, 2003, p. 196). In conceptualizing emotion coaching PES, this similar balance of warmth and control could be termed structure and may be most important for adjustment outcomes.

Taken together, a plausible explanation for inconsistent findings in the relation between emotion coaching PES and adolescent emotion regulation and adjustment is that typological PES approaches (e.g. using parent interviews to assess PES styles) confound structured approaches to

PES with unstructured approaches that reflect warmth but not control or structured feedback. Whereas dimensional approaches (e.g. measuring specific coaching behaviors and collapsing across component scores to create a unitary emotion coaching construct) do not capture how theoretically meaningful clusters of emotion coaching PES dimensions concertedly function to impact adolescent outcomes. An example of the utility in bridging these dimensional and typological approaches was seen in the work of Hersh and Hussong (2009). They demonstrated that emotion coaching and emotion dismissing reactions interact to define parenting styles, that in turn plays an important role in adolescents' negative affect-linked substance use. This work further suggests that the dimensional approach to considering PES may thus benefit from an incorporation of the styles literature by using PES theory to disaggregate the emotion coaching style into combinations of dimensions that may better define and differentiate the component parts of the coaching construct.

To this end, for the purposes of this study PES emotion coaching was disaggregated into unstructured emotion coaching behaviors (UEC) and structured emotion coaching behaviors (SEC) behaviors. UEC behaviors were operationalized as parent behaviors that pertain to warmth, awareness, and acceptance of their own and their child's emotions. SEC behaviors were operationalized as parent behaviors that involve instruction and problem-solving regarding the adolescent's expression and experience of emotion, such as encouragement of exploring solutions for coping with emotional experiences. Disaggregating the emotion coaching construct in this manner is in line with the larger parenting literature and may prove informative in understanding optimal adolescent adjustment outcomes.

### *The Current Study*

This study examines how the PES dimensions of UEC and SEC behaviors predict emotion regulation and internalizing and externalizing symptomatology in adolescents. As a strength of the current study, a macro-level observational coding scheme was developed to assess dimensions of emotion coaching. Five specific aims were addressed: (1) to evaluate the reliability of a macro-analytic coding system for UEC and SEC behaviors, (2) to determine whether SEC behaviors are more highly correlated with emotion dismissing behaviors than UEC behaviors, (3) to determine whether SEC behaviors and UEC behaviors predict adolescent internalizing and externalizing symptoms, (4) to evaluate the hypothesis that SEC behaviors and UEC behaviors predict adolescent emotion regulation, and (5) to test whether emotion regulation mediates the relationship between UEC and SEC behaviors and adolescent internalizing and externalizing symptoms.

## METHODS

Data from the High School Transition Study (HSTS) study, a multi-phase, longitudinal study aimed at examining adolescents transitioning to high school (Hussong, 2005) were used to examine the proposed research questions. The study included four phases of data collection. In Phase 1, 399 of 436 8th grade students in participating schools completed classroom administered surveys assessing a broad array of factors, including risk indicators for substance use in high school (i.e., initiation of alcohol use themselves or by their friends). For Phase 2, participants were recruited from the Phase 1 sample according to their rank-ordering of risk status (i.e., from high to low). Contact was attempted for 198 Phase 1 participants, with 81 agreeing to participate. Primary reasons for non-participation were inability to contact (n=33), ineligibility (n=20, language barrier, moving, did not pass grade), limited availability (n=17), and privacy concerns (n=11). Of 145 eligible, contacted families, 56% participated in Phase 2. Current analyses were drawn from Phase 2. During this phase, adolescent-parent dyads participated in an observationally coded stress-disclosure task, completed measures assessing adolescent psychopathology, and an experience sampling method (ESM) was used to capture adolescent daily affect and other behavioral indicators. The current study modeled emotion regulation by using the fluctuation in daily affect measured during the ESM period. Support for this approach to capturing emotion regulation comes from developmental research on emotion regulation, which posits that increased fluidity in changes of emotion states and reduced negative affect intensity are seen as being indicators of effective adaptive emotional regulation ability

(Cole et al., 1994; Ram & Gerstorf, 2009), and a lack of fluidity can be an indicator of emotion regulation deficits and psychopathology.

### *Participants*

Participants for the current analyses were drawn from Phase 2. Using the elevated risk participants from this phase of the study increased the likelihood of capturing elevated levels of internalizing and externalizing symptoms as both of these forms of symptomatology have demonstrated comorbidity with substance use (see Chassin et al., in press). Of the 81 parent-adolescent dyads participating in Phase 2, 77 (95%) participated in the parent-adolescent observation tasks from which the PES construct was derived. Of these, nine interactions could not be coded due to audio problems or poor task engagement, and one adolescent had sufficient missing data on measures of interest to be excluded from coding system validation. An additional two participants were dropped from the observational sample due to missing data on the 21-day Experience Sampling Method (ESM) procedure, yielding a final sample of 65 adolescent-parent dyads (80% of the original Phase 2 sample). Adolescents in this validation sample were predominantly female (54%), 14 years of age ( $m=13.9$ ), and Caucasian (57%), with 13% identifying as African-American, 1.5% as Latino/Hispanic, 1.5% Asian American or Pacific Islander, 1.5% as American Indian, 1.5 as other, and 24% as multiracial. Parents were predominantly female (94%) with a mean age of 43. The majority of parents identified as Caucasian (64%), 25% as African-American, 1.5% as Latino/Hispanic, 3% as Asian American or Pacific Islander, and 1.5% as Native American, and 4.5% as multi-racial. Parents generally were highly educated with 13% having graduated high school, 24% having completed some college or vocational school, 43% having completed college, and 20% having completed graduate training.

## *Procedure*

Following Phase 1, families were contacted by phone and by mail based on pre-established risk criteria involving adolescents' or friends' initiation of substance use by the Spring semester of 8th grade. Thus, from high to low risk, families were contacted to participate in the more intensive Summer follow-up (Phase 2). Verbal consent was obtained from the adolescent and at least one parent from each family over the phone and written consent upon interview. No participants were excluded based on gender, ethnicity, or socioeconomic status, although we were only able to interview families for Phase 2 Summer interviews in which the adolescent and at least one parent spoke English at a level that allowed them to complete the interview and consent procedures.

Phase 2 data collection involved two home- or university visits set three weeks apart conducted by trained pairs of graduate and undergraduate interviewers. These visits employed multiple methods of assessment and were multi-informant. During the initial visit, adolescents completed computerized interviews in which sensitive questions were administered via an audio-casi procedure. In a separate location within the house, parents completed parallel measures. Research assistants read aloud questions to parents who recorded their answers privately using paper-and-pencil methods. To ensure privacy, interviewers used white noise machines and guarded participants from other family disruptions during testing. After completing these surveys, adolescents and parents were asked to engage in three video taped observation tasks, including a stress-disclosure interaction task. Adolescents and their parents each received \$15 for completing this interview.

During the initial visit of Phase 2 data collection, adolescent-parent dyads were asked to engage in a series of video taped interaction tasks, one of which was used for the observational



coding scheme in the current study. At the end of the initial visit, adolescents were given a watch with pre-set alarms to remind them over the subsequent 3-week period to record their affect thrice daily. The three alarms signaled affect recordings at randomly selected times between 10AM-2PM, 2PM- 6PM, and 6PM-10PM to capture varying mood over the day. Attached to the watch was a mood rating booklet on which adolescents placed stickers on numbers corresponding to the extent to which they felt particular emotions at that moment. Adolescents were also encouraged to call the research project toll free to confidentially report their data for the day, as a back-up system for lost data. The actual affect rating slips that adolescents completed each day were collected at the end of the 3- week experience-sampling period. Adolescents received \$1 per day of recordings and were also entered in a lottery for three \$30 prizes for each time they called in their data (Hersh, 2008).

### *Measures*

*Demographics.* During Phase 1, adolescents reported on their race and gender. Due to limited sample size, race comparisons will only be between Caucasian and non-Caucasian youth. All other demographic variables were assessed at Phase 2. Adolescents reported on their age, and parents reported on mother and father educational status.

*Internalizing symptomatology.* Depression was assessed with the thirteen items from the Short Mood Feelings Questionnaire-Child (SMFQ-C) version developed by Angold et al. (1995). Participants responded to statements assessing depressive symptoms occurring in the past three months by marking (2) true, (1) sometimes true, or (0) not true. Angold et al. found an adequate internal reliability for this scale ( $\alpha = 0.85$ ). The SMFQ-C also correlates moderately high with the Child Depression Inventory (CDI) ( $\alpha = 0.67$ ) and the Diagnostic Interview Schedule for Children (DISC-C) depression score ( $\alpha = 0.65$ ), establishing high criterion validity.

Anxiety was measured using 19 items taken from the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978) to indicate the level of anxiety of the participants in the past three months for the initial visit. Participants were instructed to answer yes or no (0=no, 1=yes) as to whether the statement was true of themselves or not. The RCMAS is a revision of the longer Children's Manifest Anxiety Scale (CMAS); however, no significant reduction in reliability was found with the shortened scale. For the full 28 item RCMAS, there is a KR20 reliability estimate of .83-.85. In the current study, a mean of the standardized anxiety and depression scales formed the internalizing scale and scores were calculated for parent reports of adolescent symptoms (anxiety,  $M = 0.46$ ,  $SD = 0.28$ ;  $\alpha = .80$ ; depression,  $M = 0.34$ ,  $SD = 0.30$ ;  $\alpha = .84$ ) and adolescent reports of their own symptoms (anxiety,  $M = 0.41$ ,  $SD = 0.28$ ;  $\alpha = .78$ ; depression,  $M = 0.42$ ,  $SD = 0.38$ ;  $\alpha = .88$ ). These scores were included in the subsequent analyses.

*Externalizing symptomatology.* This construct reflects the sixteen items of aggression taken from the Problem Behavior Frequency Scale (Farrell, Kung, White, & Valois, 2000) and were administered to participants to assess the frequency of problem behaviors in the past 3 months. Items were rated on a 6-point scale ranging from (0) never to (5) 20 times or more and assessed non-physical aggression (seven items), physical aggression (six items), and delinquency (three items). Four items were omitted because they assessed problem behavior within the school context and were thus inappropriate for the summer interviews. In the current study, a mean of these items formed the externalizing scale and scores were calculated for parent reports of adolescent symptoms ( $M = .86$ ,  $SD = 1.03$ ;  $\alpha = .85$ ) and adolescent reports of their own symptoms ( $M = 1.03$ ,  $SD = 1.15$ ;  $\alpha = .85$ ). Both parents and teens reported on the teens' externalizing symptoms and these scores were included in the subsequent analyses.

*Emotion regulation.* Studies examining PES as it relates to emotion regulation in both children and adolescents have typically utilized parent and teacher reports of emotion regulation, and in one case used real time verbal expressions of emotion to indicate adaptive and maladaptive emotion regulation strategies (Ramsden & Hubbard, 2002; Cunningham et al., 2009; Dunsmore et al., 2013; Lunkenheimer et al., 2007; Morelen & Suveg, 2012; and Shortt et al., 2010). As a strength of the current study, an experience sampling method was used to capture daily adolescent emotion regulation.

Daily mood was assessed during the 21-day period of Phase 2 through the experience sampling procedure. Adolescents rated on a 5- point scale their experience of four negatively-valenced moods (sad, worried, stressed, mad) and one positively-valenced mood (cheerfulness) (items are from MAACL-R, Lubin, Denman & Van Whitlock, 1998). Daily mood reports were compared with data phoned in each night by our adolescents to screen the quality of the data. A quality rating system was developed to score the confidence in each data point. Ratings ranged from “very confident” where the two forms of reported data overlapped (45%) to “skeptical” where only booklet ratings were available and stickers were placed in between response options (less than 1%). For the current analyses, only data rated “confident” (99%), was used—that is in which a participant clearly reported their mood in at least one form (Hersh, 2008).

A technique employed by Gottfredson and Hussong (2011) was used to measure emotion regulation. Negative affect scores for sad, mad, worry, stress, and reverse-scored cheerfulness were combined to create a single negative affect scale. An average was taken across the three daily occasions of negative affect measurement in order to characterize daily negative affect levels and an average across daily negative affect scores served as the person-mean score of negative affect. Daily negative affect scores were subtracted from the person-mean negative

affect score. The absolute value of these deviation scores were then summed within days, then averaged over the 21-day period, to index volatility in daily emotion as an indicator of emotion regulation.

*Parental emotion socialization (PES).* During the initial visit of Phase 2 data collection, adolescent-parent dyads were asked to engage in a series of video taped interaction tasks in which adolescents disclosed a personal stressor that they felt they could discuss with their parent for five minutes. (If adolescents had significant trouble generating a stress-related topic to discuss, they were asked to discuss the upcoming high school transition.) Interviewers made every effort to prevent discussion of a topic of mutual concern or conflict between adolescents and parents. The task was relatively open-ended, adolescents were able to choose their own meaningful personal stressor to discuss, interviewers and other family members remained as unobtrusive as possible, and white noise machines were used to help ensure confidentiality of the content of the discussions. Taking these steps made it so that participant reactivity was relatively low and generalizability of the observed interactions was enhanced (Aspland & Gardner, 2003).

All PES behaviors were coded from this task. The PES emotion coaching construct was based on prior conceptualizations of emotion-related supportive parenting (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002; Gottman et al., 1996) and was disaggregated into what was termed UEC behaviors and SEC behaviors. In addition, emotion dismissing behaviors were assessed (following scheme used in Hersh & Hussong, 2009). (See appendix for coding conventions and operationalizations).

UEC behaviors were defined by a parent demonstrating that they viewed their adolescent's display of emotions as a time for intimacy. Parents engaging in these behaviors displayed warmth towards the adolescent and displayed awareness and acceptance of their own

and their child's emotions. Parents displayed warmth and support by being responsive, sensitive, and open towards the adolescent's efforts to discuss their stress or emotion. In doing so they demonstrated a desire to understand what their child was going through and tried to make the discussion of stress or negative emotion a more comfortable experience. UEC behaviors included parent displays of empathy and efforts to stress the importance of allowing their child to feel their feelings. These behaviors were typified by communication through both verbal and non-verbal means.

SEC behaviors were defined by a parent demonstrating that they viewed their adolescent's display of negative emotions as an opportunity for teaching and providing direct instruction regarding the adolescent's expression and experience of emotion. In this case, parents made an active effort to help their child recognize and modulate their emotional experiences. Parents demonstrated respect for their child's autonomy by encouraging the exploration of solutions for coping with emotional experiences and providing tangible aid, ideas, or suggestions for how to best deal with an emotional experience. Parents made suggestions in an effort to help the adolescent focus their efforts to modulate emotions without overpowering the adolescent's suggestions nor discrediting their efforts. Rather parents attempted to make the emotional experience a teaching moment. These behaviors were communicated solely through verbal behaviors.

Emotion dismissing behaviors were defined based on the coding scheme used by Hersh and Hussong (2009). This construct included a combination of three codes adapted from prior work. The first code was a punitive code based on conceptualizations by Fabes and colleagues (2002) and Gottman and colleagues (1996), reflecting parental reactions involving punishing or expressing disapproval of the stress, emotion, or stressor itself. Punitive reactions also can

involve parents blaming the adolescent for their stress or emotion, or disputing or negating the fact that the adolescent is indeed experiencing stress or particular negative affect. The second code was a magnifying code, reflecting parental responses to adolescent's negative emotion or stress that serve to encourage (or discourage) the expression of negative emotion or stress through parental matching of adolescents' negative emotion or stress level, parental escalation of adolescents' negative emotion or stress level, or parents' expanding on adolescents' disclosed negative emotion or stress. The last code was a parental minimizing/trivializing code including behaviors considered to be a reflection of the parent's distress. Minimizing parental reactions were defined as involving underestimating, playing down, or otherwise diminishing the importance of the adolescent's stress or emotion and was adapted from conceptualizations by Fabes and colleagues (2002) and Gottman and colleagues (1996).

The coding system used for the interaction task followed a meso-analytic rating approach (Mahoney, Coffield, Lewis, & Lashley, 2001) in which global Likert scale ratings were given for each minute of the interaction (see Appendix B for rating form used in the present study). The justification for coding in this manner is that utilizing per minute ratings should help to minimize inference and potential error that may take place when global codes are used to give general impressions over a relatively extended period of time (Mahoney et al., 2001).

The study involved one primary coder and one reliability coder. The reliability coder was trained in observational coding inclusive of discussions of case examples and the principles of the coding system. Additional training took place where the reliability coder practiced with adolescent-parent interactions taken from Phase 4 of HSTS in order to establish reliability. During this training phase intraclass correlation coefficients (ICC) were computed between the primary and reliability coders' ratings to estimate reliability (Shrout & Fleiss, 1979) using a cut-

off of .70, which is above the minimum suggested cut-off (see Mahoney et al., 2001 and Lindahl, 2001). To account for the possibility that observer agreement could decline over time with the application of a coding system to observational data (Taplin & Reid, 1973), the reliability coder rated one-third of the interactions and every third interaction was subjected to a reliability check against the criterion coder. If the reliability estimate fell below the established ICC cut-off (Mahoney et al., 2001), retraining took place where the coders discussed the reasons for the discrepancies in the ratings, and the reliability coder coded other training tapes until the ICC was reestablished at or above the determined cut-off. Subsequently the reliability coder would proceed to code the next set of designated interactions.

## RESULTS

Descriptive statistics and correlations are reported in Table 1. Of note, SEC behaviors and UEC behaviors were not significantly correlated ( $r = 0.08$ , *ns*) and parents were more likely to engage in SEC behaviors ( $M = 11.62$ ) than UEC behaviors ( $M = 10.11$ ;  $t(61) = 2.67$ , *ns*).

*Aim 1: To determine the reliability of the coding system for structured and unstructured emotion coaching PES behaviors*

Topics discussed in the parent-adolescent stressor task centered around interpersonal issues (25%), academics (25%), time management (15%), and the high school transition (35%). Interaction tasks had relatively strong ecological validity in that the majority of adolescents (74%) and parents (83%) felt that the stress disclosure discussions were at least somewhat similar to conversations they typically had about adolescents' concerns and that they at least sometimes had this type of conversation (Hersh, 2008). Inter-rater reliability for the observational coding system involved ratings from the reliability coder judged against the criterion coder for each of the two emotion coaching codes with each minute of the five-minute interaction serving as the unit of analysis. To compute final reliability estimates for each observational code, ICCs were averaged across the two coders and percent agreement was measured by calculating the percentage of minutes where the criterion coder and the reliability coder were, at most, zero or one point away from each other on the Likert scale ratings. Based on these criteria the UEC behaviors construct was found to be highly reliable with an ICC of .89 ( $p$



< .001) and percent agreement of 100 percent. The SEC behaviors construct was also found to be highly reliable with an ICC of .94 ( $p < .001$ ) and percent agreement of 100 percent.

*Aim 2: To test the hypothesis that structured emotion coaching behaviors will be more highly correlated with emotion dismissing behaviors than will be unstructured emotion coaching behaviors*

Two ordinary least squares regression models were conducted, controlling for gender, to examine whether SEC behaviors codes predicted emotion dismissing codes. As a follow up analysis, a similar model was run assessing for whether UEC behaviors codes predicted emotion dismissing codes. As with all regressions, preliminary analyses were conducted to assess the distributions of predictor variables and outcome variables as well as checking assumptions of multivariate normality and linearity, and homoscedasticity and normality of residuals. Outlier analyses, particularly *DFFITs*, *DFBETAS*, and Cook's D, were conducted and no influential observations were found.

Contrary to what was hypothesized, the relation between SEC behaviors parenting behaviors and emotion dismissing behaviors was non-significant ( $\beta = -0.02$ , *ns*) but UEC behaviors were significantly and negatively correlated with emotion dismissing behaviors ( $\beta = -0.33$ ,  $p = 0.006$ ). Following Steiger's (1980) method for testing the difference between two dependent correlations that have one variable in common, these two correlations were found to be significantly different from each other ( $z = 2.08$ ,  $p = 0.04$ ). Thus, emotion dismissing behaviors were more strongly associated with UEC behaviors than with SEC behaviors, though the association was negative.

*Aim 3: To test the hypothesis that unstructured emotion coaching behaviors, structured emotion coaching behaviors and their interaction will predict adolescent internalizing and externalizing symptoms*

In order to test whether UEC behaviors and SEC behaviors uniquely predicted adolescent and parent reports of adolescent adjustment (internalizing and externalizing) ordinary least squares (OLS) regression models were conducted, each controlling for adolescent gender (see Table 2). UEC behaviors were not found to be predictive of adolescent reports of their externalizing symptoms  $\beta = -0.02$ ,  $t(64) = -0.57$ ,  $p > .05$  or parent reports of adolescents' externalizing symptoms  $\beta = -0.03$ ,  $t(64) = -0.78$ ,  $p > .05$ . Nor were UEC behaviors predictive of adolescent reports of their internalizing symptoms  $\beta = -0.07$ ,  $t(64) = -1.43$ ,  $p > .05$ . UEC behaviors were significantly predictive of parent reported adolescent internalizing symptoms, such that higher engagement in these parenting behaviors predicted less adolescent internalizing symptoms,  $\beta = -0.12$ ,  $t(64) = -2.53$ ,  $p < .05$ . UEC also explained a significant proportion of variance in parent reported adolescent internalizing symptoms,  $R^2 = 0.09$ ,  $F(2, 61) = 3.19$ ,  $p < .05$ .

SEC behaviors were not found to be significantly predictive of adolescent reports of their externalizing symptoms,  $\beta = -0.05$ ,  $t(64) = -1.27$ ,  $p > .05$ . However, SEC behaviors were significantly predictive of adolescent reports of their internalizing symptoms, such that higher engagement in these parenting behaviors predicted less adolescent internalizing symptoms,  $\beta = -0.12$ ,  $t(64) = -2.52$ ,  $p < .05$ . SEC behaviors also explained a significant proportion of variance in adolescent reports of their externalizing symptoms,  $R^2 = 0.10$ ,  $F(2, 61) = 4.46$ ,  $p < .05$ . This was the only case where adolescent reports of their own symptomatology was significantly related to parent emotion coaching behaviors.

SEC behaviors were also significantly predictive of parent reports of adolescent externalizing symptoms, such that higher engagement in these parenting behaviors predicted less adolescent externalizing symptoms,  $\beta = -0.12$ ,  $t(64) = -3.25$ ,  $p < .01$ . SEC behaviors also explained a significant proportion of variance in parent reported adolescent externalizing symptoms,  $R^2 = 0.16$ ,  $F(2, 61) = 5.93$ ,  $p < .01$ . Lastly, SEC behaviors were not significantly predictive of parents reports of adolescent internalizing symptoms,  $\beta = -0.07$ ,  $t(64) = -1.37$ ,  $p > .05$ .

Extending the previous analyses, following procedures outlined in Cohen, Cohen, West, and Aiken (2003) for testing interactions in multiple regression, hierarchical linear regression analyses were conducted to assess whether SEC behaviors and UEC behaviors interacted to predict internalizing and externalizing symptoms. All models included gender as a covariate. Analyses were conducted for each outcome variable (parent and adolescent reports of internalizing and externalizing symptoms) with adolescent gender and the UEC behaviors variable in the first step, the SEC behaviors variable in the second step, and the emotion coaching interaction term in the third step. No interaction terms were significant in any of the models (see Table 2).

However, unique effects of SEC behaviors on adolescent reports of their internalizing symptoms,  $\beta = -0.12$ ,  $t(64) = -2.42$ ,  $p < .05$ , were found even after controlling for UEC behaviors  $\beta = -0.06$ ,  $t(64) = -1.29$ ,  $p > .05$ , and adolescent gender  $\beta = -0.67$ ,  $t(64) = -2.05$ ,  $p = 0.045^+$ ;  $F(3, 60) = 3.56$ ,  $p < .05$ ,  $R^2 = 0.15$ . Additionally, unique effects of SEC behaviors on parent reports of adolescent externalizing symptoms,  $\beta = -0.28$ ,  $t(64) = -2.30$ ,  $p < .05$ , were found even after controlling for UEC behaviors  $\beta = -0.23$ ,  $t(64) = -1.51$ ,  $p > .05$ , the emotion coaching interaction term  $\beta = 0.02$ ,  $t(64) = 1.41$ ,  $p > .05$ , and adolescent gender  $\beta = 0.22$ ,  $t(64) = 0.87$ ,  $p > .05$ ;  $F(4, 59)$

= 3.56,  $p < .05$ ,  $R^2 = 0.19$ . Lastly, unique effects of UEC behaviors on parent reports of adolescent internalizing symptoms,  $\beta = -0.12$ ,  $t(64) = -2.43$ ,  $p < .05$ , were found even after controlling for SEC behaviors,  $\beta = -0.06$ ,  $t(64) = -1.23$ ,  $p > .05$ , and adolescent gender  $\beta = -0.12$ ,  $t(64) = -0.33$ ,  $p > .05$ ,  $F(3, 60) = 2.65$ ,  $p = 0.056$ ,  $R^2 = 0.12$ .

Overall, these results indicate that the impact of UEC behaviors and SEC behaviors on adolescent adjustment outcomes were not dependent on each other. However, multiple regression analyses demonstrated that the main effects findings carried over. SEC behaviors continued to uniquely predict adolescent reports of internalizing symptoms and parent reports of adolescent externalizing symptoms, and UEC behaviors continued to uniquely predict adolescent reports of internalizing symptoms. Thus, these additional analyses demonstrated the robustness of the main effects findings.

*Aim 4: To test the hypothesis that structured emotion coaching behaviors and unstructured emotion coaching behaviors predict adolescent emotion regulation*

Ordinary least squares (OLS) regression analyses were conducted in order to examine the hypothesis that emotion coaching behaviors predicted adolescent emotion regulation as measured by daily negative mood ratings while controlling for adolescent gender. UEC behaviors were not a significant predictor of emotion regulation,  $\beta = 0.002$ ,  $t(62) = 0.13$ ,  $p > .05$ . SEC behaviors were significantly predictive of adolescent emotion regulation, when controlling for adolescent gender and UEC behaviors, such that higher engagement in SEC behaviors predicted less emotional lability,  $\beta = -0.03$ ,  $t(62) = -3.00$ ,  $p < .01$ .

*Aim 5: To test the hypothesis that emotion regulation mediates the relationship between emotion coaching behaviors and adolescent internalizing and externalizing symptoms*

To investigate whether adolescent emotion regulation mediates the relation between SEC behaviors PES behaviors and adolescent internalizing and externalizing symptoms (see Table 4), path analyses were estimated using Mplus Version 7.3 (Muthén & Muthén, 1998-2012). In four path models, the mediating role of emotion regulation in the relation between SEC behaviors and adolescent symptoms was tested. (UEC did not significantly predict adolescent emotion regulation in hypothesis 4, thus mediation models including this variable were not tested). The path models predicting parent reports of adolescent internalizing and externalizing symptoms did not find an association between emotion regulation and these outcomes, thus there was no evidence of a mediating effect of SEC behaviors on these outcomes via emotion regulation ( $\beta^* = -0.03$ ,  $SE = 0.05$ ,  $p = 0.39$ ;  $\beta^* = -0.04$ ,  $SE = 0.04$ ,  $p = 0.33$ , respectively).

However, SEC behaviors parenting behaviors were significantly related to adolescent reports of internalizing symptoms indirectly via their effect on adolescent emotion regulation ( $\beta^* = -0.12$ ,  $SE = 0.06$ ,  $p < .05$ ; see Figure 1) and emotion regulation fully mediated this relationship. Moreover, SEC behaviors parenting behaviors were moderately significantly related to adolescent reports of externalizing symptoms indirectly via their effect on adolescent emotion regulation ( $\beta^* = -.09$ ,  $SE = 0.05$ ,  $p = 0.073$ ; see Figure 2). Both of these findings supported the hypothesized mediational model.

## DISCUSSION

Using a unique approach to examining parent emotion socialization, the current study tested whether two aspects of emotion coaching, SEC and UEC behaviors, uniquely predicted adolescent emotion regulation and in turn adjustment outcomes. Results indicated that UEC and SEC behaviors were nearly orthogonal constructs, representative of unique dimensions of parent emotion socialization, that were each predictive of adolescent psychopathology. As hypothesized, emotion regulation either partially or fully accounted for the relation between SEC behaviors and adolescent reports of their own psychopathology. These results are consistent with previous studies that generally find an association between emotion coaching parenting behaviors and a multitude of adjustment outcomes including fewer behavioral problems, better emotion regulation and lower depressive symptomatology (Eisenberg et al., 1998; e.g. Brophy-Herb, Stansbury, Bocknek, & Horodynski, 2012; Gottman et al., 1997; Shipman et al., 2007). Nonetheless, there has been inconsistency in findings linking PES behaviors to these outcomes (Cunningham, Kliewer, & Garner, 2009; Shortt, Sheeber, Low, & Katz, 2010). The current study similarly finds a generally positive impact of emotion coaching parenting behaviors on adjustment outcomes, but also suggests that previous inconsistent findings may be due to the aggregation of potentially unique emotion coaching behaviors (i.e., warm, responsive support and structure) on adolescent adjustment indicators. The importance of disaggregating emotion coaching behaviors and considering their differential impact on adolescent internalizing and externalizing symptoms, are further discussed below.

### *Disaggregating emotion coaching PES behaviors*

Traditional models of PES test two dimensions, emotion coaching and emotion dismissing parenting behaviors, but there may be variability within emotion coaching PES that is meaningful in predicting adolescent outcomes. Supporting this hypothesis, UEC and SEC behaviors were not significantly correlated with each other, indicating that they function independently and perhaps represent separate dimensions of emotion coaching behaviors. Consistent with prior research, UEC behaviors were negatively correlated with emotion dismissing behaviors (Ramsden & Hubbard, 2002). The inverse relationship between UEC behaviors and dismissing behaviors may suggest that these PES behaviors are incompatible and would be unlikely to occur simultaneously. Indeed, prior research has indicated that emotion coaching may inhibit parents' derogatory behaviors (Gottman et al., 1996). Thus, the presence of warmth and validation may decrease the likelihood of ignoring, denying or trivializing an adolescent's experience of negative affect. As a result, these two PES behaviors could be conceptualized as occupying opposite ends of a spectrum defined by warmth and validation.

A similar shared dimensional relation was posited between SEC behaviors and emotion dismissing behaviors. This hypothesis stemmed from the operationalization of SEC behaviors as lacking the warmth associated with UEC behaviors. In the absence of this warmth, it was posited that there was potential for youth to view parent's engagement in problem-solving type behaviors as dismissing. However, SEC behaviors were unrelated to dismissing behaviors. This indicates that these are orthogonal constructs that may occur simultaneously yet function independently. One way in which these constructs could co-occur, for example, involve a parent who is considered dismissive via behaviors that show little care or intent to comfort and validate the adolescent's emotional experience, paired with SEC behaviors that provide ways of solving

the problem presented by the emotional stressor. It is conceivable to see how a parent might have difficulty validating an adolescent's emotional experience by showing warm, responsive support but find it easier to engage in teaching and problem-solving. Although SEC behaviors lack the warm, responsiveness characteristic of UEC behaviors, this does not necessitate that SEC would appear dismissing (as was hypothesized). SEC behaviors include parents showing an interest in aiding the adolescent in their emotional experience, as well as showing that they value the adolescent's contribution to the process. Therefore, SEC behaviors may provide a different form of validation, likely accounting for why these PES behaviors are uncorrelated with emotion dismissing behaviors.

Taken together, the findings from the current study suggest that there are indeed two dimensions of emotion coaching with support for these hypothesized dimensions falling along axes of warmth and structure. Moreover, findings suggest that UEC behaviors may occur opposite emotion dismissing behaviors on a spectrum of warmth and validation. Support for distinctions between coaching PES behaviors was further demonstrated by their being uniquely predictive of adolescent emotion regulation, internalizing and externalizing symptoms. There was no interaction between SEC behaviors and UEC behaviors predicting outcomes, suggesting that the impact of one was not dependent on the impact of the other. Rather they seem to have additive effects with each showing unique positive impacts on adolescent outcomes. As such, the decision to align these coaching behaviors along axes of warmth and structure adds to the current conceptualization of PES dimensions.



*Unstructured emotion coaching PES uniquely impacts adolescent internalizing symptoms*

UEC behaviors uniquely predicted fewer adolescent symptoms of anxiety and depression and were unrelated to other outcomes. Studies in adolescence have typically shown that emotion coaching behaviors are inversely related with both internalizing and externalizing symptoms (Bronstein, Briones, Brooks, & Cowan, 1996; Garside & Klimes-Dougan, 2002; Katz, 1997; Shortt, Sheeber, Low, & Katz, 2010; Shortt, Smith, and Stoolmiller, 2006). However, the present finding is consistent with other work demonstrating that emotion coaching behaviors are uniquely associated with fewer adolescent internalizing symptoms but not associated with externalizing symptoms (Stocker, Richmond, Rhoades, & Kiang, 2007; Katz & Hunter, 2007). Although congruent with prior research, this finding indicates a unique effect of UEC behaviors on adolescent internalizing symptoms over and above SEC behaviors.

There are many mechanisms that may explain the unique effects of UEC behaviors on adolescent internalizing symptoms; however, the warm, responsive support characteristic of these PES behaviors likely plays a key role in how they confer their effects. An extensive review of the literature has identified supportive parenting, characterized by interactional warmth, responsiveness (including acceptance of their child's feelings, active listening, praise, use of reflection, etc.), sensitivity and empathy, as a critical factor for positive youth outcomes, inclusive of internalizing symptomatology (Barber, Stolz, & Olsen, 2005). Researchers hypothesize that parents' supportive responses to their child's negative affect have a direct soothing effect, promote higher tolerance of negative affect and teach how to self-soothe and adaptively focus attention during strong emotional states (Gottman, Katz, & Hooven, 1997), reducing sensitivity to internalizing symptomatology. Furthermore, supportive parenting communicates a message that emotions are understandable and acceptable. Taken together, UEC

behaviors likely foster a positive, nurturing home environment and create an outlet for youth to feel secure addressing their emotional experience. This type of environment increases the propensity for adolescents to learn appropriate emotion expression and modulation of internalized affect by providing more opportunities to engage in these experiences (Chorpita & Barlow, 1998; Eisenberg, Fabes, & Murphy, 1996; Parker, 1983).

The effects of UEC were specific to internalizing symptoms and were unrelated to adolescent emotion regulation or adolescent externalizing symptoms. Previous studies have shown that discipline and monitoring are more strongly predictive of externalizing symptoms than is parental warmth and responsiveness; and the converse is true for internalizing symptoms (Barber, Stolz, & Olsen, 2005). That same finding appears to hold for UEC behaviors as an indicator of warmth and responsiveness in PES. Conversely, SEC behaviors are more related to behavioral control, that ideally provides adolescents with guidelines for appropriate behavior and has been consistently associated with lower levels of externalizing problems (Barber & Olsen, 1997; Garber, Robinson, & Valentiner, 1997; Gray & Steinberg, 1999; Pettit, Laird, Dodge, Bates, & Criss, 2001).

#### *Structured emotion coaching PES and the mediating effects of emotion regulation*

SEC behaviors reflected how parents facilitated the process of reappraising an emotional stressor in an adaptive manner through support such as narrowing global stress, weighing pros and cons, providing concrete suggestions of what to do and assisting the adolescent in engaging in alternative perspective taking. Parents did this while simultaneously validating the adolescent's ability to participate in the process. SEC behaviors either directly or indirectly predicted all adolescent outcomes (parent reports of adolescent externalizing symptoms,

adolescent reports of internalizing and externalizing symptoms, and emotion regulation), but one (parent reports of adolescent internalizing symptoms, solely related to UEC behaviors).

SEC behaviors provide tangible support for managing emotional experiences through supporting adolescent's contribution to problem solving and through parents providing advice for problem solving when necessary. The first aspect centers around encouraging the adolescents' sense of self-efficacy in managing stressors by promoting the independent exploration of solutions. The second aspect centers around parents engaging in scaffolding without taking over and problem solving for the adolescent. Parents' validation of the adolescent's ability to contribute to the process is imperative, especially considering the increasing significance of autonomy during adolescence and its link to adolescent externalizing symptoms (Allen et al., 1994; Steinberg, 2001).

SEC behaviors likely impact how adolescents are socialized to cope with stressful experiences. Several studies have shown that coping aimed at addressing the stressor (as opposed to regulating the emotional states resulting from the stressor) is associated with fewer internalizing and externalizing symptoms in adolescence (Compas et al., 2001). These active, or problem-focused, coping efforts closely parallel SEC behaviors and are inclusive of responses such as seeking information, generating possible solutions to a problem, and taking actions to change the circumstances that are creating stress (Lazarus & Folkman, 1984). Overall, SEC behaviors encourage self-efficacy and mastery over problem solving around emotional experiences and, although these behaviors showed direct effects on adolescent outcomes, their predictive value may be best understood by their impact on adolescent emotion regulation.

Findings demonstrated that SEC behaviors involve much more than the direct transfer of skills from parents to adolescents. Whereas these behaviors likely have the direct effect of impacting knowledge of how to select appropriate strategies and responses to an emotional stressor, they also impact the ability to manage emotion regulation. Path analyses indicated that emotion regulation fully mediated the relationship between SEC behaviors and adolescent reports of internalizing symptoms. Additionally, path analyses showed that emotion regulation partially mediated the relationship between SEC behaviors and adolescent reports of externalizing symptoms and this relationship was moderately significant. As hypothesized, SEC behaviors appear to map onto skills necessary for modulating affective states (Gross, 1998). Socializing adolescents in a structured manner of engaging in emotional approach behaviors likely provides the adolescent with more cognitive and behavioral resources for navigating emotional experiences. Indeed, research shows that engaging with a stressor (e.g. approach-oriented coping) is a primary mechanism for self-regulation when experiencing stress (Compas et al., 2001; Eisenberg, Fabes, & Guthrie, 1997). Furthermore, evidence suggests that problem solving around a stressor reduces associated negative affect by helping individuals change the meaning attributed to experiences of emotions and how they perceive external threat prior to a situation (Ehrenreich, Goldstein, Wright, & Barlow, 2009). Consequently, SEC behaviors likely impact adolescent internalizing and externalizing symptoms due their direct effects on emotion modulation and expression. SEC behaviors may help adolescents develop a repertoire of emotion regulation skills—important, because stressful experiences require flexibility in the application of regulation strategies depending on the context (Cole, Michel, & Teti, 1994).

### *Strengths and Limitations*

Strengths of the current study include the use of an observational coding system to investigate the specific emotion coaching PES behaviors that parents use with their adolescents when discussing a stressor. Few studies have incorporated an observational design in the examination of PES behaviors in adolescence, and none of these studies have utilized a global rating scale in an attempt to distinguish between types of emotion coaching parenting behaviors clustered in a way that parallel the warmth and structure dimensions seen in the larger parenting literature. Moreover, no studies examining the potential mediating role of emotion regulation between PES and adjustment outcomes have taken a novel approach to measuring emotion regulation like that implemented in the current study.

Despite these strengths, there are also several limitations. First, though the modest sample size allowed for detection of significant results, a larger sample size would allow for more confidence in the detected effects as well as the generalizability of the findings. Second, these emotion coaching behaviors coded during this task were assumed to be representative of typical parenting behaviors when really this interaction provided only a snapshot of the parent-adolescent relationship. Third, data from this study are cross-sectional and thus precludes an understanding of the prospective impact that these emotion coaching parenting behaviors may have on adolescent internalizing and externalizing symptomatology. Finally, adolescent symptomatology and emotion regulation ability could be evocative of the types of PES behaviors that parents utilize. For example, research pertaining to social interaction theory suggests that negative affect in offspring can elicit diminished support in parents (Coyne, 1976; Pineda, Cole, & Bruce, 2007), thus it may be important to consider the bidirectional relationships between

these emotion coaching types in the context of the type and severity of the adolescent's symptom presentation.

### *Future Directions, Implications and Conclusions*

Though the current coding system provided an excellent global assessment of the emotion coaching styles used by parents during adolescent stress disclosure and adolescent reactions were taken into consideration, the macro coding of these behaviors does not allow for the measurement of the dynamic interaction patterns of parents and adolescents. Thus, future research would benefit from utilizing coding schemes that capture the bidirectional processes involved in UEC and SEC behaviors. Also, while the use of observational measures is certainly considered an advantage, future work may benefit from the incorporation of multi-time point observational assessments paired with multi-time point assessments of stable, trait-like indicators of PES behaviors, such as the parent meta-emotion interview (Gottman, 1997). Doing so would allow for capturing the stability or change in these parenting behaviors over time and provide further support of construct measurement through the convergence of observational and interview measures.

The current study employed an observational coding system to investigate how parents engage in two styles of emotion coaching parenting behaviors and how these parenting practices relate to adolescent emotion regulation, internalizing, and externalizing symptomatology. Of note, these parenting factors were measured during the transition to high school, a time of increased stress for adolescents. These findings demonstrate the protective role of emotion coaching parenting behaviors during this developmental period. While most studies on emotion coaching parenting behaviors have collapsed across dimensions of this construct, these findings

support the idea that it may be important to take a more nuanced approach to examining this construct. This study is the first of its kind to re-cluster emotion coaching PES behaviors in a manner that is in keeping with the larger parenting literature that indicates a balance of warmth and structure may be most optimal for adjustment outcomes. Indeed, analyses demonstrated that there are two styles of emotion coaching PES behaviors, structured and unstructured and that these coaching behaviors take their effects depending on the type of adolescent psychopathology being examined. The support provided through UEC and SEC behaviors PES behaviors each yielded unique positive impacts on adolescent emotion regulation, internalizing and externalizing symptomatology. UEC behaviors may yield its effects through the warmth, genuine interest, and validation these behaviors convey, providing adolescents with a safe-place to feel like their emotional experience is okay and acceptable. Whereas, SEC behaviors may yield its effects through the more active role parents play in guiding adolescents through their emotional experiences. Taken together, these coaching behaviors likely impact adolescent's sense of control or self-efficacy over their emotional experiences through parents providing validation and encouragement of autonomy, as well as conveying acceptance of the veridical nature of the adolescent's perspective on their emotional experience.

This study provides support for the utility of disaggregating the warmth and structure dimensions of emotion coaching PES behaviors as unstructured and structured types are shown to uniquely predict adolescent outcomes. Furthermore, these findings provide support for emotion regulation as a mechanism through which SEC behaviors effects adolescent outcomes. These findings carry implications for clinical interventions targeting PES behaviors that may be most optimal depending on the type of adolescent adjustment behavior that needs targeting (e.g. anxiety versus aggression). Thus, furthering work on this topic may elucidate parent-training

interventions that target how parents use these emotion coaching types, potentially optimizing parent-adolescent interactions especially during periods of stress and transition for developing adolescents.



Table 1. Descriptive statistics for levels of adolescent internalizing and externalizing symptoms and PES behaviors within participant.

		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1.	Unstructured Emotion Coaching	--							
2.	Structured Emotion Coaching	0.08	--						
3.	Emotion Dismissing	<b>-0.38***</b>	-0.04	--					
4.	Parent report - Internalizing Symptoms	<b>-0.31*</b>	-0.17	<b>0.26<sup>+</sup></b>	--				
5.	Parent report - Externalizing Symptoms	-0.11	<b>-0.39***</b>	0.07	0.2	--			
6.	Adolescent report - Internalizing Symptoms	-0.17	<b>-0.27*</b>	-0.05	<b>0.22<sup>+</sup></b>	0.18	--		
7.	Adolescent report - Externalizing Symptoms	-0.08	-0.19	0.04	0.19	<b>0.30*</b>	0.09	--	
8.	Emotion Regulation	0.02	<b>-0.35**</b>	0.03	<b>0.23<sup>+</sup></b>	0.15	<b>0.32*</b>	<b>0.30*</b>	--
	<b>Mean</b>	10.11	11.62	19.92	0	0.86	0	1.03	0.43
	<b>SD</b>	3.33	3.39	2.93	1.34	1.03	1.37	1.15	0.26

Note: + indicates a p-value < .10; \* indicates a p-value of < .05, \*\* indicates a p-value of < .01, \*\*\* indicates a p-value of < .005

Table 2. Summary of regression analyses for Hypothesis 3: Unstructured (UEC) and Structured (SEC) Emotion Coaching Predicting Adolescent Adjustment

Step	Predictors	Internalizing Symptoms (Parent report)				Externalizing Symptoms (Parent report)				Internalizing Symptoms (Adolescent report)				Externalizing Symptoms (Adolescent report)			
		b	SE	t	p	b	SE	t	p	b	SE	t	p	b	SE	t	p
1	Adolescent gender (control)	-0.05	0.32	-0.15	0.88	0.27	0.26	1.02	0.31	-0.55	0.34	-1.63	0.11	<b>0.51</b>	<b>0.28</b>	<b>1.80</b>	<b>0.08<sup>+</sup></b>
	UEC	<b>-0.12</b>	<b>0.05</b>	<b>-2.53</b>	<b>0.01*</b>	-0.03	0.04	-0.78	0.44	-0.07	0.05	-1.43	0.16	-0.02	0.04	-0.57	0.57
2	Adolescent gender (control)	-0.12	0.33	-0.33	0.74	0.15	0.25	0.60	0.55	<b>-0.67</b>	<b>0.33</b>	<b>-2.05</b>	<b>0.045*</b>	0.46	0.29	1.60	0.11
	UEC	<b>-0.12</b>	<b>0.05</b>	<b>-2.43</b>	<b>0.02*</b>	-0.02	0.04	-0.59	0.56	-0.06	0.05	-1.29	0.20	-0.02	0.04	-0.47	0.64
	SEC	-0.06	0.04	-1.23	0.22	<b>-0.12</b>	<b>0.04</b>	<b>-3.17</b>	<b>0.002**</b>	<b>-0.12</b>	<b>0.05</b>	<b>-2.42</b>	<b>0.02*</b>	-0.05	0.04	-1.22	0.23
3	Adolescent gender (control)	-0.13	0.34	-0.39	0.70	0.22	0.25	0.87	0.39	<b>-0.7</b>	<b>0.33</b>	<b>-2.12</b>	<b>0.04*</b>	<b>0.53</b>	<b>0.29</b>	<b>1.84</b>	<b>0.07<sup>+</sup></b>
	UEC	-0.06	0.20	-0.27	0.78	-0.23	0.15	-1.51	0.14	0.06	0.20	0.29	0.77	-0.24	0.17	-1.38	0.17
	SEC	-0.01	0.17	0.05	0.96	<b>-0.28</b>	<b>0.12</b>	<b>-2.30</b>	<b>0.03*</b>	-0.02	0.16	-0.12	0.90	-0.23	0.14	-1.62	0.11
	UEC X SEC	-0.01	0.02	-0.33	0.75	0.02	0.01	1.41	0.16	-0.01	0.02	-0.62	0.53	0.02	0.01	1.31	0.20

Note: + indicates a p-value < .10; \* indicates a p-value of < .05

Table 3. *Summary of regression analyses for Hypothesis 4: Emotion Coaching Predicting Adolescent Emotion Regulation*

Predictors	Emotion Regulation			
	b	SE	t	p
Adolescent gender (control)	-0.05	0.07	-0.75	0.46
Unstructured Emotion Coaching	-0.003	0.01	-0.27	0.79
Adolescent gender (control)	-0.08	0.06	-1.33	0.19
Structured Emotion Coaching	<b>-0.03</b>	<b>0.01</b>	<b>-3.04</b>	<b>0.004**</b>
Adolescent gender (control)	-0.08	0.06	-1.32	0.19
Unstructured Emotion Coaching	0.0002	0.01	0.02	0.99
Structured Emotion Coaching	<b>-0.03</b>	<b>0.01</b>	<b>-3.00</b>	<b>0.004**</b>

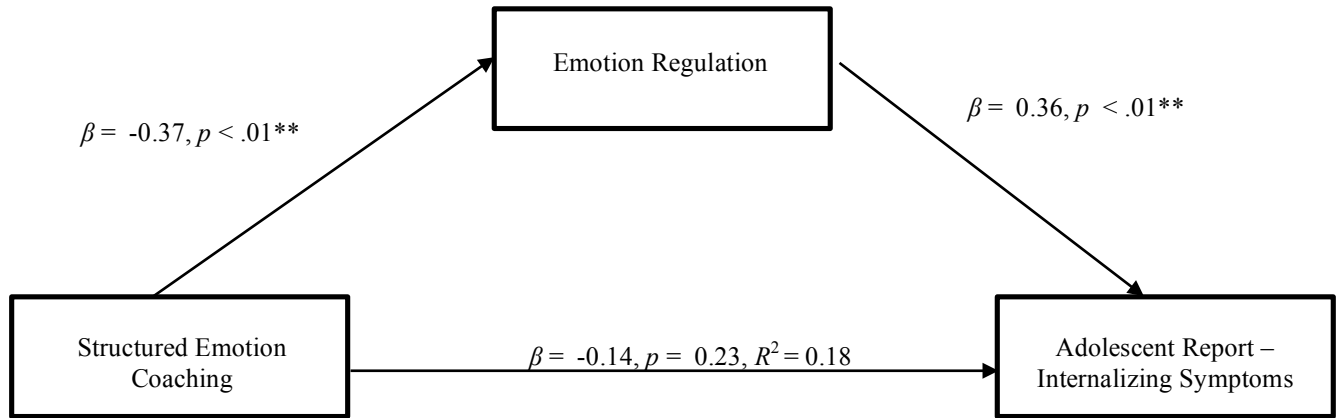
Note: + indicates a p-value < .10; \* indicates a p-value of < .05; \*\* indicates a p-value of < .01

Table 4. Summary of Path Analyses for Hypothesis 5: Emotion Regulation Mediating the Relationship Between Structured Emotion Coaching (SEC) and Adolescent Adjustment

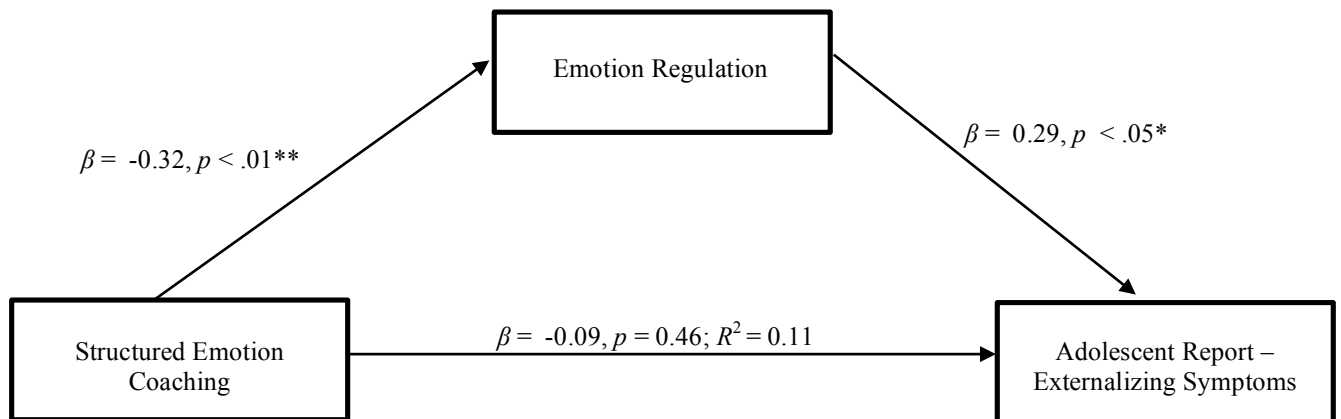
Predictors	Internalizing Symptoms (Parent report)			Externalizing Symptoms (Parent report)			Internalizing Symptoms (Adolescent report)			Externalizing Symptoms (Adolescent report)		
	b	SE	<i>p</i>	b	SE	<i>p</i>	b	SE	<i>p</i>	b	SE	<i>p</i>
SEC	-0.13	0.13	0.30	<b>-0.35</b>	<b>0.11</b>	<b>0.002**</b>	-0.14	0.12	0.23	-0.09	0.13	0.46
Emotion Regulation	0.12	0.14	0.37	0.13	0.13	0.31	<b>0.36</b>	<b>0.12</b>	<b>0.002**</b>	<b>0.29</b>	<b>0.12</b>	<b>0.02*</b>
via Emotion Regulation	-0.03	0.05	0.39	-0.04	0.04	0.33	<b>-0.12</b>	<b>0.06</b>	<b>0.04*</b>	<b>-0.09</b>	<b>0.05</b>	<b>0.07+</b>
<i>R</i> <sup>2</sup>							0.18	0.09	<b>0.04*</b>	0.11	0.07	0.14

Note: + indicates a p-value < .10; \* indicates a p-value of < .05, \*\* indicates a p-value of < .01

**Figure 1.** *Emotion regulation mediating the relationship between Structured Emotion Coaching parenting behaviors and adolescent report of internalizing symptoms*



**Figure 2.** *Emotion regulation mediating the relationship between Structured Emotion Coaching parenting behaviors and adolescent report of externalizing symptoms*



## APPENDIX A

### Parent Emotional Socialization Coding Manual

#### **GENERAL APPROACH TO MACRO-LEVEL BEHAVIOR RATINGS**

*The parental reactions to adolescents' stress disclosures are rated on a 4-point Likert type scale. Borrowing from Brody et al.'s (1995) observational coding system for assessing a variety of parental and family-level behaviors for adolescent-parent interactions, the presence, quality, and the intensity of the particular parental behaviors are all considered equally important. Below is a general rubric to keep in mind when making your ratings for each behavioral code. More specific rating scale definitions are provided within each code.*

<u>Rating</u>	<u>General Description</u>
1	<b><i>Absent.</i></b> Not at all characteristic, never occurring; no intensity. <i>(The absence of a particular behavioral code can occur for a variety of reasons including that the code was simply not germane to the topic at hand or because the parent does not engage in such behaviors)</i>
2	<b><i>Minimal.</i></b> Mainly uncharacteristic; occurring rarely or infrequently; low intensity
3	<b><i>Moderate.</i></b> Moderately characteristic; occurring fairly often or only moderately consistently, or at low, moderate, or high intensity (i.e., can occur fairly frequently but still at low intensities)
4	<b><i>Strong.</i></b> Very characteristic; occurring very frequently or consistently; with considerable evidence; low, moderate, or high intensity (i.e., can occur very frequently at low intensities)

#### **Global Coding Instructions**

Each five-minute interaction should be watched four times. For the second and third passes, you will provide *per minute* ratings using the Likert-scaled detailed above. During the first viewing, you should observe the discussion without any particular focus or intention of scoring. This first pass is to understand what issue the parent and adolescent are discussing. After this first viewing, you should watch the interaction a second time coding per minute for the presence of UEC behaviors parenting behaviors. After this second pass, you should watch the interaction a third time coding per minute for the presence of SEC behaviors parenting behaviors. For the final pass, you should watch the interaction and globally rate the use of UEC behaviors *and* structured behaviors for the entire interaction (i.e. one global score per code, so two values), again following the global Likert-scale detailed above.

## CODING CONVENTIONS

1. Begin to code parental reactions when timer starts/when the interviewer says “Begin” or when the timer beeps.
2. If adolescent and parent are “topic shopping” after the timer starts, you may still code parental responses/behaviors that serve to encourage or discourage discussion of stress. You must determine if these parental behaviors are indeed relevant to the adolescent’s motivation or ability to discuss their personal stressor. “Topic shopping” is a process whereby the parent and adolescent are searching for a personal stressor the adolescent can discuss with his/her parent. During this process, a parent may shoot down the adolescent’s bid to discuss a certain stressor or may trivialize the extent of the stress related to a suggested stressor. Any of these types of parental behaviors should be coded.
3. If more than one legitimate topic is discussed (i.e., dyad switches topics in middle of the 5 minutes), you should note this and code both discussions.
4. If dyad ends initial discussion early and does not return to the original stressor or another any significant/meaningful stress topic, stop coding. I.e., if they’re just “shooting the breeze,” mark “N” in the “on-topic” column, and make a note of this at the bottom of the rating form. Similarly, if the dyad switches from a meaningful topic to a non-meaningful topic and back again, do not code the duration of the non-meaningful material. Make clear documentation of this on the rating form.
  - Examples of non-meaningful topics may include a) dinner plans, b) household chores, etc. See “On-topic behavior” section in Coding Manual.
  - When in doubt, see criterion coder to discuss.
5. If a parent’s statement or behavior spills over only a few seconds into the next codable minute, rate that behavior in the minute the behavior began (e.g., Minute 1). If the behavior/statement that began in Minute 1 continues well into the next minute, use the information in these statements/behaviors to inform both Minute 1 ratings as well as Minute 2 ratings.
7. Code the parent’s statements/behaviors but in the context of the dyad (see section on rating using context)

## RATING USING CONTEXT

Embedded within the following codes is the implicit idea that the parent is not behaving in a vacuum. Rather, the meaning of the parent's behavior is in part determined by the adolescent's reactions to his/her parent. Therefore, the adolescent's reactions need to be considered when making a rating of parent reactions to adolescents' stress. Provided below are examples of scenarios in which the adolescent's behavior may alter your rating of the parent's reactions to the adolescent's stress.

- Parent makes what can be considered a joke. However, the adolescent does not respond in kind and clearly does not take the parent's comments as a joke. This may lead you to consider a code of "emotion dismissing" because parental *punitiveness* can include "making fun of or teasing the adolescent for their negative feelings or stress."
- Parent begins to help adolescent problem-solve the stressor. However, as the parent continues, the adolescent shuts down and becomes more withdrawn and less participatory. The parent is seemingly helping problem-solve and behaving positively toward the adolescent but is becoming "non-supportive" in that she is inhibiting the adolescent's own disclosure of the stress and is potentially hindering the adolescents' ability to problem-solve on his/her own in the presence of his/her parent. Thus, this parent may receive a high rating of "SEC behaviors" for the first minute of the discussion but may then receive high ratings of "emotion dismissing" as the parent steals the floor and as the adolescent, in effect, retreats into his/her own space. (Without considering the adolescents' behavior in response to his/her parent, it is enticing to view this scenario as largely supportive.)



## UNSTRUCTURED EMOTION COACHING

### DEFINITION

Parents treat adolescent displays of emotion as a time for intimacy. Parents display warmth towards the adolescent and an awareness and acceptance of their own and their adolescent's emotions. Parents aim to validate their adolescent's expression and experience of emotion. Parents display empathy and may stress the importance of allowing their adolescent to feel their feelings.

### OPERATIONALIZATION

#### Verbal Content

- Asking stress/distress related questions or trying to understand the adolescent's emotional state
  - e.g., "So what else about the situation stresses you out?"; "What other things about it bother you?"; "How did that make you feel?" "Did it make you worried?"; "Is it because you were stressed?"; "What started the fight that made your friend mad at you?"
  - e.g., "Tell me what you mean by that" (said in response to the adolescent's emotion/stress related utterance)
    - The key here is the parent is homing in on the adolescent's emotional state rather than merely the issue/stressor that can be discussed without any affective quality
  - e.g., "I felt that way once. Tell me more about it"
    - You will need to consider whether or not the parent is adolescent-focused here of whether they talk so much about how they themselves felt that it steals the adolescent's speaking space. If it seems more parent-focused then this would not be Emotion Coaching Unstructured.
- Empathizing with or understanding the adolescent and his/her stress or negative emotion; sharing of the adolescent's emotional state
  - e.g., "Yeah, I know, I can understand how you feel"
- Providing comfort to the adolescent's emotion displays or statements indicating negative affect
  - e.g., "It's going to be okay" (However, if a statement like this is followed by a statement like "Don't worry about it", this would *not* be considered Emotion Coaching)
- Normalizing of adolescent's emotional state or stress. Parent allows the adolescent to feel the emotion or stress because it's natural to experience it. Parents temper their encouragement of emotional expression so as not to promote catastrophizing of the adolescent's emotional state
  - In this case the parent is demonstrating for the adolescent that what they are feeling is okay.
    - e.g. "It's okay to feel stressed about that. It's normal to feel pretty frustrated in that situation".
    - e.g. "When you play in front of people for the first time, that can always be a really nerve-racking experience"

- Reflecting the adolescent's emotion
  - e.g., "You seem stressed"
- Validating the adolescent's emotional experience
  - e.g., "I know this is hard for you, it's a difficult time"
- Encouraging the adolescent's expression of stress or negative emotion. Creating a sense of emotional security by conveying that talking about these topics is something that is okay and that the adolescent is welcome to do so.
  - e.g., "You can talk to me about it" or "Do you want to talk more about why that upset you?"

### Attending and responding

- Uses active listening skills
  - May use "mm-hms" or head nods to promote continued discussion of stress(or)
  - May gently and empathically finish adolescent's sentence as if to know exactly how they are feeling or what they are thinking
  - May comment reflecting on what adolescent has just talked about
- Attends to adolescent and his/her concerns rather than being self-focused and caught up in own issues
- Attempts to understand what the adolescent is concerned about
- Helps generate and allows free flow of discussions, this occurs with the parent prompting with questions and allowing the adolescent the opportunity to respond. The parent allows the conversation to flow without dominating the discussion.
  - If adolescent's style is marked by interrupting parent, however, and the parent needs to interrupt to say anything, consider an SEC behaviors code.

### RATINGS

1. There is an **absence** of emotion coaching unstructured behaviors or any general impression of parental responses that display warmth, awareness, acceptance, and encouragement of the adolescent's expression of emotion. To be rated a "1" for a given minute, there is no evidence that the parent is interacting with the adolescent in a way that is conducive to the teen discussing their stressors such as the parent showing empathy, comfort, or validation to the adolescent or reflecting the adolescent's emotional state.
2. There is **minimal** indication of emotion coaching unstructured behaviors or any general impression of parental responses that display warmth, awareness, acceptance, and encouragement of the adolescent's expression of emotion. To be rated a "2", there is slight evidence of ECU behavior but this behavior is seen very infrequently within the minute-long duration and is of low intensity. There is one brief, subtle, or low intensity statement or ECU statement or question. Parents receiving a "2" for a given minute show subtle encouragement of the adolescent's expression of emotion/discussion of a stressor or ask one question that elicits the adolescent to express their feelings.
3. There is a **moderate presence** of emotion coaching unstructured behaviors or any general impression of parental responses that display warmth, awareness, acceptance, and encouragement of the adolescent's expression of emotion. Moderate presence indicates that

ECU behavior is occurring fairly often or only moderately consistently (i.e. can occur fairly frequently and at low intensities). To be rated a “3” for a given minute, the parent normalizes the adolescent’s distress, asks questions about how they feel or about details of the stressor and displays empathy regarding how they are feeling. A parent can be rated a “3” if there is more than one ECU response and these multiple responses represent moderate intensity and/or frequency. A “3” is also warranted if there is just *one* ECU response (i.e. less frequency) but it is of strong intensity. Parents receiving a “3” respond to their teens stress/emotional expressivity with a fair amount of ECU behaviors, that goes beyond minimal evidence but without being characteristic of the minute-long duration.

4. There is a **strong presence** of emotion coaching unstructured behaviors or any general impression of parental responses that display warmth, awareness, acceptance, and encouragement of the adolescent’s expression of emotion. Strong presence indicates that the parent is clearly invested in allowing their adolescent to be expressive of their emotions and discuss stressors freely. Parents receiving a “4” rating for a given minute show clear efforts to gather how their teen is feeling, to validate their teen’s emotional experience surrounding the stressor, and to make their teen feel comfortable with being forthright about their feelings. Parents receiving a “4” also focus on or emphasize the emotional aspects of the stressor through reflections of the teens emotion, consistent empathy, ECU questions, normalizing of the stress, etc. To receive a “4” for a given minute there should be consistent and pervasive ECU responding, *several* ECU behaviors of low to high intensity that go beyond a moderate or minimal amount. This parent is clearly invested in their teen’s emotional experience and feelings of stress and maintains this interest and care through a *majority* of the minute-long duration.

## **STRUCTURED EMOTION COACHING**

### **DEFINITION**

Parents view adolescent displays of negative emotions as an opportunity for teaching and provide guidance or instruction regarding adolescent's expression and experience of emotion. Parents make an effort to help their adolescent modulate their emotional experiences. Parents demonstrate respect for adolescent's autonomy by encouraging the exploration of solutions for coping with emotional experiences and providing tangible aid/ideas/suggestions for how to best deal with emotional experiences. Suggestions are made in an effort to help adolescents focus their efforts to modulate emotions, not overpower adolescent suggestions nor discredit their efforts.

### **OPERATIONALIZATION**

#### **Verbal Content**

- Providing the adolescent with directives in dealing with stressors, so as to help an adolescent express more “global stress” to identify specific stressors or negative affect, so that they can then be addressed. This differentiation/narrowing is done in an effort to provide more tailored emotion-related help.
  - e.g. “I can see there are a lot of things stressing you right now, which is bothering you the most right now?”
  - e.g. “It sounds like you were pretty upset by what your teacher said to you. It seems like maybe you were feeling more anxious than angry about her comments about your presentation.”
- Helping problem-solve around the adolescent's emotion or stress(or) by helping adolescent generate plausible solutions. This is a more passive approach to problem-solving in that the parent provides guidance for helping the adolescent think through the situation.
  - e.g. “What do you think we could do to make this less upsetting for you?”
  - e.g. “What do you think about talking to your teacher about it. Would that help?”
    - This needs to be carefully considered and distinguished from parents limiting their adolescent's ability to make their own decisions. To be coded as emotion coaching structured there needs to be an overall quality of cooperative discussion and process of mutual resolution of the adolescent's stressor. This is the adolescent's stressor after all and not for the parent to resolve alone.
- Providing guidance and/or advice for the adolescent to deal with stress(or). Parent takes a more active role in helping the adolescent generate solutions. This should not occur exclusively, rather, more passive problem-solving guidance should be present concurrently or preceding the parent taking a more active/suggestive role. Context is important here because the parent could be autonomy-inhibiting (emotion dismissing), if they do not allow the adolescent to contribute to generating solutions. However, this behavior may be more supportive if the parent helps with guidance/advice when the adolescent seems “stumped” for ideas or missed identifying some probable solutions. Parents may also demonstrate this behavior by providing informational support through

helping the adolescent “think ahead” and prepare for potential issues they may encounter in trying to deal with their negative affect or stressor.

- e.g. “You might think about letting your friend know that you didn’t mean to say what you said”
  - Watch for unsolicited advice that takes on the quality of a lack of faith in the adolescent’s ability to handle the stressor on their own.
- Providing instrumental/tangible aid to help adolescent deal with stress(or)
  - e.g. “I could drive you to the movies on the weekends if that would help solve the transportation issue”
    - *Watch for quality of parental over-protectiveness. These should be suggestions rather than imposing a solution without consideration for the adolescent’s input.*
- Helping reframe the situation so that the adolescent can think about the situation in different (more constructive) ways. This behavior may include helping the adolescent to reframe their approach to their emotion or stressor by helping them have realistic expectations and helping them with perspective taking, for example by citing past achievements that would indicate that the adolescent already has the skills to handle the stressor.
  - e.g. “Have you thought about the idea that maybe your teacher was interested in seeing you succeed rather than really trying to punish you?”
  - e.g. “I understand that was upsetting for you, but do you think that was the best response?” or “I know that made you angry, but do you think you should have gotten that angry about it?”
  - e.g. “Well, remember that you have always done well preparing for exams in the past, so how can you prepare for this exam in a similar way?”
  - With these type of “reframing” responses, watch for Emotion Dismissing parental behavior. A parent could appear to help the adolescent view the stressful situation in a different and positive light but could actually be minimizing the stress the adolescent is under.
    - Example of a response that sounds like reframing but is actually minimizing: “It’s probably just that your teacher was trying to help you succeed. I don’t think you should be upset by his conversation with you.”

## **RATINGS**

1. There is an **absence** of emotion coaching structured behaviors or any general impression of parental responses that use adolescent’s emotional experience and/or discussion of stress as a time for teaching and providing guidance or instruction. To be rated a “1” for a given minute, there is no evidence that the parent is interacting with the adolescent in a way that is conducive helping their teen modulate their experience of emotion.
2. There is **minimal** indication of emotion coaching structured behaviors, or any general impression of parental responses that use adolescent’s emotional experience and/or discussion of stress as a time for teaching and providing guidance or instruction. To be rated a “2”, there is slight evidence of ECS behavior but this behavior is seen very infrequently within the minute-long duration and is of low intensity. There is one brief, subtle, or low intensity statement or ECS statement or question. Parents receiving a “2” for a given minute

show subtle directive statements that display an effort to help the adolescent understand their emotion experience or stressor or make one teaching or instructive remark that provides understanding or guidance in navigating the emotional experience/discussion of the stressor.

3. There is a **moderate presence** of emotion coaching structured behaviors or any general impression of parental responses that use adolescent's emotional experience and/or discussion of stress as a time for teaching and providing guidance or instruction. Moderate presence indicates that ECS behavior is occurring fairly often or only moderately consistently (i.e. can occur fairly frequently and at low intensities). To be rated a "3" for a given minute, the parent encourages their teen to explore solutions for coping with their emotional experience or stress(or) and provides some ideas or suggestions for how the teen may better handle the situation. Parents receiving a "3" provide suggestions that are not well developed or explained, in that they may present an idea without a clear delineation of how that suggestion may address the teens issue. A parent can be rated a "3" if there is more than one ECS response and these multiple responses represent moderate intensity and/or frequency. A "3" is also warranted if there is just *one* ECS response (i.e. less frequency) but it is of strong intensity. Parents receiving a "3" respond to their teens stress/emotional expressivity with a fair amount of ECS behaviors, that goes beyond minimal evidence but without being characteristic of the minute-long duration.
  
4. There is a **strong presence** of emotion coaching structured behaviors or any general impression of parental responses that use adolescent's emotional experience and/or discussion of stress as a time for teaching and providing guidance or instruction. Strong presence indicates that the parent is clearly invested in helping their teen learn from their emotional experience or stress(or). Parents receiving a "4" rating for a given minute show clear efforts to provide their teen with guidance for coping with their emotional experience or stress (or) by providing tangible aid/ideas/suggestions for how to best deal with emotional experiences. These efforts to teach should be clearly connected to what the teen is experiencing in that when the parent provides a suggestion, they make a clear connection to how it will help the teen with what they are experiencing. Parents receiving a "4" also focus on or emphasize helping the teen differentiate between their emotions, especially in cases where the teen is expressing a global feeling of distress with no specific labels of emotion. The parent also helps the teen to identify and understand what about a stressor is contributing to the emotional experience a teen is having. To receive a "4" for a given minute there should be consistent and pervasive ECS responding, *several* ECS behaviors of low to high intensity that go beyond a moderate or minimal amount. This parent is clearly invested in their teen's learning from and understanding of their emotional experience and stress and maintains this effort through a *majority* of the minute-long duration.

## **EMOTION DISMISSING**

### **DEFINITION**

Parents view adolescent expressions of negative emotions as inappropriate and a nuisance and trivialize emotion expression. Parent reactions may involve punishing or expressing disapproval of the stress, emotion, or stressor itself. Parent may blame the adolescent for their stress or emotion, or dispute or negate the fact that the adolescent is indeed experiencing stress or particular negative affect. Within the context of adolescence it is important to consider how a parent may inhibit the adolescents' capacity to experience, express, and manage their stress in a relatively independent manner. Parent may underestimate, downplay, or otherwise diminish the importance of the adolescent's stress or emotion.

**CODES ADAPTED FROM HERSH & HUSSONG (2009), not included in this manual.**

APPENDIX B

Coding System Rating Form

**Parent Emotion Socialization**

**Global Rating Sheet**

Coder: \_\_\_\_\_

Tape #: \_\_\_\_ - \_\_\_\_\_

Topic: \_\_ Discussion starts at min \_\_\_\_\_

**Observations**

Scores	Emotion Coaching Unstructured				
	<i>Minute 1</i>	<i>Minute 2</i>	<i>Minute 3</i>	<i>Minute 4</i>	<i>Minute 5</i>
<b>1<sup>st</sup> Viewing</b>					
<b>2<sup>nd</sup> Viewing</b>					
<b>4<sup>th</sup> Viewing</b>					
Global Score					

Scores	Emotion Coaching Structured				
	<i>Minute 1</i>	<i>Minute 2</i>	<i>Minute 3</i>	<i>Minute 4</i>	<i>Minute 5</i>
<b>1<sup>st</sup> Viewing</b>					
<b>3<sup>rd</sup> Viewing</b>					
<b>4<sup>th</sup> Viewing</b>					
Global Score					

**Absence**

**Minimal**

**Moderate**

**Strong**

1

2

3

4

**Notes**

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