# DEVELOPMENT AND INITIAL VALIDATION OF THE CHILDREN'S SADNESS MANAGEMENT SCALE

Janice Zeman, Kimberly Shipman, and Susan Penza-Clyve

*ABSTRACT:* Although sadness in children is a normal and transient experience, research has not investigated how children manage sadness. Understanding normative sadness management has important implications for helping children who exhibit maladaptive forms of emotional expression. The Children's Sadness Management Scale (CSMS) was developed to assess children's inhibition, dysregulated-expression, and coping with sadness experience and expression. Using multiple informants, reliability and validity were established based on a community sample of 227 fourth- and fifth-grade children's self-report, maternal report (N = 171), and peer ratings of behavior (N = 227). A three-factor solution was supported with strong internal consistency for the Inhibition scale and moderately strong internal consistency for the Emotion Regulation Coping and Dysregulated-Expression scales. Findings indicate that the CSMS provides a reliable and valid measure of normative sadness management.

#### KEY WORDS: emotion management; children; assessment; sadness.

Although healthy emotional development has long been recognized in popular culture to be associated with adaptive functioning, only recently has there been a body of empirical work that can validate the claims of such folk theories. Emotional functioning has been found to be associated with social competence (Coie, Dodge, & Kupersmidt, 1990; Little & Garber, 1995), academic competence (Casey et al., 1997; Greenberg, Kusche, Cook, & Quamma, 1995), and physical health (Creer, Reynolds, & Kotses, 1991; Salovey, Rothman, Detweiler, & Steward, 2000). Further, emotion theorists (Barrett & Campos, 1987; Halberstadt, Denham, & Dunsmore, in

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Janice Zeman, University of Maine; Kimberly Shipman; University of Georgia; Susan Penza-Clyve; Brown University School of Medicine.

Address correspondence to Janice Zeman, Department of Psychology, 5742 Little Hall, University of Maine, Orono, ME 04469-5742; e-mail: Zeman@Maine.edu.

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press; Saarni, Campos, & Mumme, 1997; Thompson, 1994) posit that emotion is critical in organizing the development of social relationships and physiological experiences as well as cognitive processes such as attention and memory.

Emotion researchers (Barrett & Campos, 1987; Halberstadt et al., in press; Saarni, 1999; Thompson, 1994) suggest that there are a variety of skills that comprise emotionally competent functioning. The first skill of interest to this research involves the ability to manage one's emotional expression. Central to this notion of self-management of emotion is the construct of emotion regulation (Barrett & Campos, 1987; Izard, 1977; Plutchik, 1993) which Thompson (1994) has defined as "... the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (pp. 27–28). Developmental theorists regard the development of emotion regulation as a major developmental task (Cicchetti, Ganiban, & Barrett, 1991; Dodge, 1989; Kopp, 1989). Significant implications for maladjustment exist when this milestone is not achieved resulting in patterns of emotion dysregulation that are expressed in the under- and over-control of emotional expression (Cole, Michel, & O'Donnell Teti, 1994a; Plutchik, 1993). Patterns of emotion dysregulation have been found in depressed children (Garber, Braafladt, & Zeman, 1991), aggressive, disruptive children (Cole, Zahn-Waxler, & Smith, 1994b), and children with somatic complaints (Karasu & Plutchik, 1978; Zeman, Shipman, & Penza, 1997). Clearly, developing the skills necessary to regulate emotional expression is a crucial developmental task that has important implications for several aspects of children's optimal development. Further, from a developmental psychopathology perspective (Sroufe & Rutter, 1984), examining the development of emotion management in normative populations is critical to understanding children who exhibit atypical emotional development.

The second area of focus in this study and a key skill in emotional competence is the ability to cope effectively with negative emotions. Saarni (1999) defines emotion regulation coping as the ability to manage emotional experience particularly with respect to its intensity and duration. When children learn to cope with aversive emotions in an adaptive, effective manner, this is thought to contribute to a sense of well-being and self-efficacy (Saarni, 1999; Thompson, 1994). In contrast, the inability to cope constructively with negative emotions has been linked to an increase in physical symptomatology and psychopathology (Garber et al., 1991; Herbert & Cohen, 1993). As such, emotion regulation coping is a form of coping that includes controlling emotional arousal to prevent undesired consequences (Lazarus, 1991; Rossman, 1992).

Only recently have emotion researchers acknowledged that children's emotion management is likely to differ as a function of emotion type. The functionalist theory of emotion (Barrett & Campos, 1987; Campos, Campos, & Barrett, 1989) posits that, through interactions with their social environment, different emotions are thought to acquire unique meanings based on the function that they serve. Normative research has validated this theoretical tenet by demonstrating that different socialization histories exist for the expression of anger, sadness, and happiness (Casey & Fuller, 1994; Saarni et al., 1997) and that children have different expectancies regarding the outcome of managing each of these emotions (Fuchs & Thelen, 1988; Zeman & Shipman, 1996, 1998). As such, when conducting research in emotional development, it is critical that emotions be examined individually, taking into consideration the unique function of each emotion.

The examination of sadness in children is a largely neglected area, particularly in comparison to the volumes written on other emotions such as anger, shame, and fear (see Lewis & Haviland, 2000, for a review). Of note is the important distinction made between sadness and internalizing disorders that involve the experience of sadness as one of the diagnostic symptoms. For example, much research has investigated childhood depression yet the experience of dysphoria or self-reported "sad feelings" is only one of five required symptoms for a diagnosis of Major Depression according to the Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition (APA, 1994). In addition, there is a body of work that has examined grief in children (Bowlby, 1980). Although grief can invoke feelings of sadness, grief is a multidimensional construct, involving multiple emotional experiences that are typically elicited by loss. Thus, the study of the normal, transient experience of sadness in children is a largely unexplored area, perhaps due to ethical and practical issues that make it more difficult to design and implement research examining this negative emotional state.

Despite a growing body of research that indicates the importance of studying facets of emotional competence, there is a surprising paucity of assessment tools to assist in this process. The available measures that investigate children's emotion management rely on parent or teacher report of children's overall ability to regulate emotion (Eisenberg, Fabes, Nyman, Bernzweig, & Pinuelas, 1994; Shields & Cicchetti, 1997) or assess family emotional climate (Halberstadt et al., 1995). Although these questionnaires provide helpful information, they do not identify patterns of emotion management for specific emotions and can only assess behaviors that are observable to others.

Research has indicated that children are thought to be more accurate reporters of their internal experiences than are caregivers and peers (Achenbach, McConaughy, & Howell, 1987), and children's and parents' recol-

lection of emotional events differ as a function of emotion and situational goals (Levine, Stein, & Liwag, 1999). Thus, children's self-report should be considered primary when assessing their emotional experiences and expression. Although children's perceptions regarding their emotional experience and emotion regulation have been examined, this research has been conducted with the use of interview protocols that tend not to generalize beyond the specific goals of the study (Fuchs & Thelen, 1988; Zeman & Garber, 1996; Zeman & Shipman, 1996). To date, there are only three guestionnaires that assess children's self-report of a specific emotional experience: the Children's Inventory of Anger (Nelson & Finch, 1978), the Pediatric Anger Expression Scale (Jacobs & Kronaizl, 1991), and the State-Trait Anger Expression Inventory (Spielberger, 1988). In addition, the Differential Emotions Scale-IV assesses the frequency with which adolescents and adults experience 12 discrete emotions, including sadness (Izard, Dougherty, Bloxom, & Kotsch, 1974). No measure, however, exists to assess children's management of normative sadness experience.

To address this gap, the Children's Sadness Management Scale (CSMS) was developed to assess three dimensions of sadness management. Consistent with the literature on emotion regulation and dysregulation (Cole et al., 1994a; Dodge & Garber, 1991; Plutchik, 1993), items were developed to form the Inhibition and Dsyregulated-Expression scales that reflect the over- and under-control of sadness expression, respectively. An additional scale was included to assess coping with sadness. Basic psychometric properties of the Children's Sadness Management Scale were established using a community sample of fourth- and fifth-grade children. Although this measure was normed on children ages 9 to 12 years, the measure has been used successfully with children as young as 6 years old (Penza-Clyve, Zeman, & Sim, 1999; Shipman, Zeman, Penza-Clyve, & Champion, 2000) and as old as 14 years (Sim, Zeman, & Nesin, 1999). Three sources of information were used to establish initial validity for this measure: selfreport of emotional experience and symptoms of anxiety and depression, maternal report of their children's emotional expressivity and general behavioral adjustment, and peer ratings of behavior.

# Method

#### Participants

Participants were 227 children, 121 boys (M age = 10 years, 9 months, SD = 9 months) and 106 girls (M age = 10 years, 8 months, SD = 16 months) who were in the fourth- (n = 85) and fifth-grades (n = 142). This sample was part of a larger project examining the relations be-

tween emotional competence and psychopathology (Zeman et al., 1997). Children were recruited from three public elementary schools serving primarily a working class, Caucasian (96%) population in a small, urban area. The majority of children lived with both biological parents (58.5%), with the remainder of children living with their mother only (22.8%), mother and step-father (10.3%), father only (2.2%), or in some other type of living arrangement (6.2%). In addition, mothers (N = 171) completed two questionnaires and peers (N = 227) rated each other on a specific set of behaviors described below. A portion of the child sample was used to establish test-retest reliability using a two-week period (N = 96).

#### Procedure

Children were group administered a research protocol in their classrooms in two, 50-minute sessions separated by two weeks. Questionnaires were read aloud while graduate students assisted individual children exhibiting comprehension or reading difficulties. During the first session, children completed the Affect Regulation Interview and the Children's Sadness Management Scale. They completed all other measures during the second session. Packets were distributed to mothers by their children and were subsequently returned through the mail.

# **Establishment of Psychometric Properties**

Development of the Children's Sadness Management Scale (CSMS) items was based on a measure in the literature that assessed anger expression (Pediatric Anger Expression Scale-III (PAES-III); Hagglund et al., 1994; Jacobs & Kronzaizl, 1991). The factor structure for the anger scale<sup>1</sup> based on the current data set, however, was found to be different from the PAES-III and earlier versions. Preliminary examination of reliability for the CSMS indicated that three items should not be included resulting in a 12-item scale. Children respond to items on a 3–point scale (1 = hardly ever, 2 = sometimes, 3 = often). CSMS factors with their items and intra-item total correlations are presented in Tables 1 and 2, respectively.

#### Scale Development and Reliability

Principal components analyses with varimax rotation extracted three factors which accounted for 51.5% of the variance. Improved accuracy is obtained when retaining only those factors with eigenvalues greater than

# TABLE 1

# Principal Components Analysis with Varimax Rotation of CSMS

	Factor Loadings		
	1	2	3
Inhibition			
2. I hold my sadness in.	.82	.00	.01
5. I hide my sadness.	.85	.03	.03
7. I get sad inside but don't show it.	.79	.11	02
12. I'm afraid to show my sadness.	.56	04	.26
<i>Emotion Regulation Coping</i> 1. When I am feeling sad, I control my crying			
and carrying on.	.17	.56	09
<ul><li>3. I stay calm and don't let sad things get to me.</li><li>6. When I'm sad, I do something totally differ-</li></ul>	.08	.57	20
ent until I calm down. 8. I can stop myself from losing control over my	.03	.63	.07
sad feelings. 10. I try to calmly deal with what is making me	03	.67	01
feel sad.	14	.68	06
Dysregulated-Expression			
4. I whine/fuss about what's making me sad.	.02	12	.78
9. I cry and carry on when I'm sad.	05	09	.81
11. I do things like mope around when I am sad.	.22	.01	.60
Note: Bold numbers indicate factor loadings. $N = 227$ .			

1.0 and factor loadings that are greater than .40 (Browne, 1968; Cattell & Jaspers, 1967; Stevens, 1996). These criteria were followed. Items and their loadings appear in Table 1. The eigenvalue of the first factor was 2.53; the second factor, 2.22; and the third factor, 1.44. Four items loaded on the first factor. All of the items referred to the inhibition of sadness expression and therefore this factor was labeled "Inhibition." The coefficient alpha for this scale demonstrated strong internal consistency (alpha = .77) and accounted for 21.1% of the variance. Test-retest data indicated a significant correlation of r = .80, p < .01. There was no significant gender difference on this scale. Table 3 presents scale means and standard deviations.

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#### TABLE 2

# **CSMS Item Means and Intra-Item Total Correlations**

Item	Intra-item total <i>r</i>	Μ	SD
5. I hide my sadness.	.69	1.80	.78
2. I hold my sad feelings in.	.62	1.85	.77
7. I get sad inside but I don't show it.	.59	1.81	.76
4. I whine/fuss about what is making me sad.	.49	1.41	.63
9. I cry and carry on when I am sad.	.43	1.51	.67
10. I try to calmly deal with what is mak- ing me sad.	.41	2.15	.73
8. I can stop myself from losing control of my sad feelings.	.40	2.22	.76
12. I'm afraid to show my sadness.	.40	1.60	.71
3. I stay calm and don't let sad things get to me.	.36	2.03	.72
<ol> <li>When I am feeling sad, I can control my crying and carrying on.</li> </ol>	.34	2.43	.72
6. When I'm sad, I do something totally different until I calm down.	.33	1.86	.74
11. I do things like mope around when I am sad.	.30	1.70	.72
<i>Note:</i> $N = 227$ .			

Five items loaded on the second factor. This scale demonstrated moderate internal consistency (alpha = .62) and accounted for 19.5% of the variance. These items all concerned strategies for coping with sadness experience by controlling sadness behaviors, thus it was termed "Emotion Regulation Coping." For sake of brevity, the scale will simply be called "Coping." Test-retest reliability indicated a significant correlation, r = .63, p < .01. There was no significant gender difference on this scale (see Table 3).

Three items loaded on the third factor which demonstrated moderate internal consistency (alpha = .60) and accounted for 13.0% of the variance. The items concerned expressing sadness in culturally inappropriate, nonconstructive ways and thus, was termed "Dysregulated-Expression." Test-retest data indicated a significant correlation, r = .63, p < .01. A mar-

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# TABLE 3

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<b>D</b>	Across Gender (n = 227)	Girls $(n = 106)$	by Gender Boys (n = 121)	t-value (df = 226)
Inhibition	7.03 (2.33)	6.80 (2.38)	7.21 (2.28)	1.31
Emotion Regula- tion Coping	10.66 (2.32)	10.91 (2.06)	10.48 (2.49)	1.40
Dysregulated- Expression	4.61 (1.50)	4.78 (1.57)	4.43 (1.38)	1.81+
<i>Note</i> : $+ p = .07$				

# ginally significant gender difference emerged for this scale with girls reporting more dysregulated expressions of sadness than boys, t(225) = 1.81, p = .07 (see Table 3).

# Assessment of Validity

#### Measures

The following measures were administered to provide preliminary validation of the CSMS by demonstrating both convergent and divergent links with sadness experience and management.

#### **Emotion Measures**

Affect Regulation Interview (ARI). This interview assesses children's decisions to express or regulate sadness and anger in the presence of a peer (Zeman & Garber, 1996; Zeman & Shipman, 1996). Children were read six vignettes that depicted three scenarios (i.e., receiving a present, going to a sporting event, attending a party) that elicited feelings of sadness and anger. Children were told to imagine that they were the protagonist in the story and then were asked, using a 4-point Likert scale, to indicate whether they would "show or not show" their sadness/anger to their friend. Scores were summed across each emotion type to yield a regulation score for each emotion. It was anticipated that findings from the sadness regula-

tion question would demonstrate convergent validity for the Sadness Inhibition scale and would not correlate significantly with the other CSMS scales due to the lack of conceptual overlap. The functionalist theory of emotion (Barrett & Campos, 1987) posits that each emotion serves a unique function within the social environment because of its different set of intra- and inter-personal consequences. As such, it was hypothesized that the anger ARI score would not correlate significantly with the CSMS Inhibition scale.

*Emotion Awareness Scale* (EAS). The EAS (Penza, Clyvet, & Zeman, 2001) is a 17-item questionnaire that uses a 5-point Likert scale to assess children's difficulty identifying negative emotional experiences and communicating these emotional states to others. Preliminary evidence indicates strong reliability (alpha = .89) and construct validity (Penza et al., 1998). Because the CSMS Inhibition and Dysregulated-Expression scales measure maladaptive sadness management, they were expected to correlate positively with the EAS whereas the CSMS Coping scale was anticipated to correlate negatively.

*Emotion Regulation Checklist* (ERC). The ERC (Shields & Cicchetti, 1997) is a 24-item questionnaire using a 4-point Likert scale that was used to assess mother's perceptions of their children's ability to manage emotion. This measure yields two empirically derived scales: (a) Emotion Regulation that assesses situationally appropriate affective displays and emotional self-awareness, and (b) Lability/Negativity, which measures mood lability and culturally inappropriate affective displays. Internal consistency has been established for this measure as well as support for its construct validity (Shields & Cicchetti, 1997). It was predicted that this measure would provide convergent validity by establishing a positive correlation between the Lability/Negativity scale and the CSMS Inhibition and Dysregulated-Expression scales. No significant relation between the Emotion Regulation scale and the CSMS Coping scale was anticipated due to a lack of conceptual similarity.

#### Psychopathology Measures

*Child Depression Inventory* (CDI). The CDI (Kovacs, 1985) is a 27item self-report questionnaire that assesses depressive symptomatology in children over the past two weeks. Acceptable levels of reliability and validity have been established (Kovacs, 1985). In order to provide measures of convergent validity, it was predicted that the Sadness Inhibition and Dys-

regulated-Expression scales would be positively correlated with the CDI, whereas the CSMS Coping scale would be negatively correlated.

*State-Trait Anxiety Inventory for Children* (STAIC). The STAIC (Spielberger, 1973) consists of 20 Likert-format items that assess self-perceptions of anxiety. Given that maladaptive emotional management is related to indices of psychopathology (Cole et al., 1994b), the same pattern of results as predicted with the CDI was expected.

Child Behavior Checklist (CBCL). The CBCL (Achenbach, 1991), a parentcompleted measure of common child behavior problems, consists of 113 questions that are answered on a three-point scale (0 = not true, 2 = verytrue). Mothers completed this measure. The CBCL yields eight syndrome scales and two broad-band categories (i.e., Internalizing, Externalizing). Research has indicated strong test-retest reliability and sound construct validity (Achenbach & Brown, 1991, for a review). In accord with the goals of this study, only the scores on the Withdrawn Behavior, Anxious/Depressed, and Social Problems subscales were used in addition to the two broad-band categories. Based on the established links between emotion dysregulation and the presence of psychological and behavioral problems (Cole et al., 1994b; Eisenberg et al., 1995), it was predicted that the Sadness Inhibition and Dysregulated Expression scales would be associated with the Internalizing broad-band scale as well as the Withdrawn Behavior, Anxious/Depressed, and Social Problems subscale scores. It was hypothesized that Sadness Coping would be inversely correlated with significant psychological difficulties as reflected in each of these CBCL scales. Given the lack of conceptual overlap of sadness management with externalizing behaviors, no significant associations with the Externalizing broad-band scale were expected.

#### Social Functioning

Considering the documented links between emotional and social competence (Halberstadt et al., 2001; Parke, Cassidy, Burks, Carson, & Boyum, 1992), a measure of peer rated social functioning was included. Using a 5-point Likert scale, children rated their peers on aggressive behaviors: starts fights, is mean, gets mad easily, and hits, pushes or kicks. With respect to aggressive behavior ratings, a negative correlation with the Coping scale was anticipated because aggressive children tend to display emotions in maladaptive, externalizing ways (Coie et al., 1990). Further evidence of discriminant validity was expected by the presence of a negative

correlation with the Dsyregulated-Expression scale given that the types of sadness behaviors in this scale (i.e., moping, crying, whining) are not typically displayed by aggressive children in this age group. No relation between Sadness Inhibition and aggressive behavior was expected given the lack of conceptual relatedness.

#### Validity Results and Discussion

Correlation matrices of the measures given are shown in Table 4.

#### Sadness Inhibition Scale

Evidence for convergent validity with other measures of emotion was established for the Sadness Inhibition scale. Analyses of the Affect Regulation Interview (ARI) question concerning regulation of sadness and anger indicated that Sadness Inhibition was significantly positively correlated with self-reports of sadness but not with anger regulation. This finding indicates that the Sadness Inhibition scale can distinguish somewhat between regulation of specific negative emotions rather than being a general indicator of negative emotional control. Findings from the Emotion Awareness Scale (EAS) also yielded convergent validity by indicating that the Sadness Inhibition scale is related to an overall style of impoverished emotion awareness and poor emotion management. Similarly, maternal report on the Emotion Regulation Checklist (ERC) indicated that Negativity/Lability scores were positively associated with higher levels of sadness inhibition. As predicted, the ERC Regulation scale was not associated with the Sadness Inhibition scale. Taken together, these findings lend preliminary support to the validity of the Sadness Inhibition scale by demonstrating that inhibition of sadness expression is positively associated with patterns of emotionally dysregulated behavior.

In relation to measures of psychopathology, Sadness Inhibition was positively associated with higher scores on the Child Depression Inventory and the State-Trait Anxiety Inventory for Children. These findings are consistent with research that suggests that a pattern of emotional over-regulation is related to less competent social functioning and the presence of psychopathology (Cole et al., 1994a; Eisenberg et al., 1995). The Inhibition scale correlated significantly with maternal report on the CBCL broad-band Internalizing scale and the Withdrawn Behavior and Social Problems narrowband scales demonstrating the relationship between the over-regulation of sadness and internalizing types of problems. Although the individual cor-

# TABLE 4

	Sadness scales			
Measures	Inhibition	Regulation coping	Dyregulated-exp.	
Emotion Measures				
Affect Reg. Interview:				
Sadness	.29**	.09	09	
Affect Reg. Interview:				
Anger	.13	.09	09	
Emotion Awareness				
Scale	.47**	20*	.48**	
Emot. Reg. Checklist:				
Regulation	03	.06	07	
Emot. Reg. Checklist:				
Lability	.18*	04	.13	
Psychopathology Measures Child Depression				
Inventory	.30**	31**	.32**	
STAIC	.30**	17*	.35**	
CBCL: Internalizing score	.16*	.02	.18*	
CBCL: Externalizing score	.15	.01	.14	
CBCL: Withdrawn				
Behavior	.17*	.07	.16*	
CBCL: Anxious/Depressed	.15	.02	.16*	
CBCL: Social Problems	.18*	.01	.16*	
Social Functioning				
Aggression ratings	.02	17*	16*	

# Convergent and Discriminant Validity of the CSMS Scales

*Note*: \*p < .05, \*\*p < .01. Affect Reg. Interview = Affect Regulation Interview sadness and anger regulation questions; Emot. Reg. Checklist = Emotion Regulation Checklist, Regulation and Lability/Negativity subscales; STAIC = State-Trait Anxiety Scale for Children; CBCL = Child Behavior Checklist.

relations were significant and the pattern of correlation is in the expected direction, the amount of variance accounted for is less than expected. This may be due to method and informant variance. The items that comprise the Inhibition scale focus on children's ability to "hide" their feelings of sadness; behaviors that are not easy for others to detect. Items on the CBCL

tend to focus more on overt behaviors associated with internalizing symptoms (i.e., "cries a lot," "unhappy, sad, or depressed," "too fearful or anxious"). Further, research indicates that children are the best reporters of their internalizing symptomatology (Achenbach et al., 1987). Thus, these correlations may be lower than anticipated given that mothers are less accurate reporters of their children's withdrawn, anxious, and depressed symptoms. Another possible interpretation lies in the use of a community sample. Inspection of the frequencies of scores for the CBCL indicated that only a small percent of the sample scored outside the normative range, thus, potentially limiting the magnitude of the correlations between the Inhibition scale and the CBCL subscales. In relation to social functioning, as anticipated, there were no associations between Sadness Inhibition and peer ratings of aggressive behavior.

# Emotion Regulation Coping Scale

Evidence for construct validity for this scale emerged. As anticipated, the Coping scale did not correlate with the Affect Regulation Interview measure due to the lack of conceptual overlap, but it was negatively correlated with the Emotion Awareness Scale. It was also inversely related to self-reported measures of psychopathology such as the CDI and STAIC. These results suggest that children who report using effective strategies for coping with sadness tend to experience lower levels of depressive and anxious symptomatology. Maternal evaluation of their children's behavioral problems as assessed using the CBCL yielded no significant relations with the Sadness Coping scale. This lack of association may be due to informant differences because children's self-report of their internalizing behaviors did yield a significant association with the Coping scale. As predicted, peer ratings of aggression were negatively associated with Sadness Coping. As demonstrated by these results and consistent with the literature, coping constructively with the normative experience of sadness appears to promote more competent psychological and social functioning (Garber et al., 1991; Lazarus, 1991).

# Dysregulated-Expression Scale

Moderately strong support for this scale emerged. As predicted, the Dysregulated-Expression scale was not related to the Affect Regulation Interview question given the lack of conceptual overlap. It was, however, strongly positively related to children's self-report of emotion dysregulation on the Emotion Awareness Scale. Interestingly, it did not correlate with maternal report of children's dyregulated expression of emotion as assessed

by the Emotion Regulation Checklist. This lack of association may simply reflect a lack of item similarity since the ERC tends to include many angerrelated items. The Dysregulated-Expression scale was significantly negatively correlated with peer ratings of aggressive behavior indicating that children who whine, mope, and cry when they are sad are not perceived by their peers as being aggressive.

Although the gender difference for the Dysregulated-Expression factor was only marginally significant, this finding indicated a trend such that girls reported expressing sadness in more overt ways (e.g., whining, crying, moping) than boys. This is consistent with the emotion socialization literature that indicates that sadness is more acceptable for girls to express than for boys (Brody & Hall, 1993). It also may be that boys were affected by social desirability pressures such that they were reluctant to admit to crying on a frequent basis. Other research using self-report data, however, has indicated similar findings with respect to crying behavior in pre-adolescent boys (Zeman & Shipman, 1996, 1998).

In relation to psychopathology, support for the Dysregulated-Expression scale emerged from both self-report and maternal-report. Specifically, scores on the Dysregulated-Expression scale were positively correlated with the CDI, the STAIC, and the CBCL Internalizing broad-band scale, in addition to the Withdrawn, Anxious/Depressed, and Social Problems narrow-band scales. As anticipated, it was not correlated significantly with the CBCL broad-band Externalizing scale. This pattern of findings suggests that the dysregulated expression of sadness is linked to symptoms of internalizing symptomatology. As suggested in other literature (Eisenberg et al., 1995; Halberstadt et al., in press; Rubin, Coplan, Fox, & Calkins, 1995), children who do not attain developmentally appropriate levels of emotional competence are at risk for the development and/or maintenance of psychological disturbance. In this case, it may be that children who express sadness in culturally inappropriate ways (i.e., whining, moping, crying) may isolate themselves from potential sources of support that, in turn, exacerbates their distress.

# Conclusion

One of the important developmental tasks facing children and adolescents is that of developing the skills required for emotionally competent functioning (Saarni, 1999; Thompson, 1994). This study examined two skills related to emotional competence; namely, management of emotional expression and emotion regulation coping. Difficulties in managing emo-

tional behavior have been linked to a variety of negative outcomes including poor social functioning (Parke et al., 1992), low academic achievement (Casey et al., 1997; Greenberg et al., 1995), poorer physical health (Creer et al., 1991; Salovey et al., 2000), and psychological maladjustment (Cole et al., 1994b, Garber et al., 1991). Thus, it is of utmost importance that researchers begin to identify patterns of emotional functioning that either place children at risk or buffer them from developing socioemotional and behavioral problems.

The goal of the present study was to construct a brief self-report instrument, the Children's Sadness Management Scale, to assess two skills involved in acquiring emotional competence: (a) management of sadness through inhibition of expression and dysregulated-expression, and (b) methods of effective coping with sadness experience. This measure represents an initial step in the development of a more comprehensive battery of instruments that will assess the several complex, inter-related skills associated with emotional competence. Data were collected using multiple informants (i.e., self, mother, peer) and multiple methods (i.e., behavior checklists, vignettes, ratings). Moderately strong indices of reliability were demonstrated for the Inhibition scale with moderate indices for the Dysregulated-Expression and Emotion Regulation Coping scales. Validity was demonstrated for each of the three scales by providing indices of convergent and discriminant validity with measures of emotion, psychopathology, and social functioning as well as examination of gender differences. The CSMS will add to the literature by enabling both researchers and clinicians to assess efficiently children's self-reported management of normative sadness experience and expression.

Although the CSMS represents an important first step in developing a more comprehensive protocol of emotional competence measures, it has several limitations. First, the data were collected from a community sample that likely resulted in a restricted range of emotional functioning and symptoms of emotional disturbance. Second, the range of ages used was somewhat limited, although research indicates that this measure can be used successfully with children from ages 6 to 14 years (Penza-Clyve et al., 1999; Shipman et al., 2000; Sim et al., 1999). Third, one of the practical strengths of this instrument is the brevity that was obtained, however, at the expense of more robust reliability indices. Fourth, the scope of this instrument is somewhat narrow and is not intended as a global measure of emotional competence. Future research should build and expand upon the concepts used in this measure when developing a more comprehensive battery of instruments to assess emotional competence.

#### Note

1. Principal components analyses on the anger scale yielded a three-factor structure that accounted for 55.9% of the variance. The Anger Regulation Coping scale (eigenvalue = 3.21, coefficient alpha = .73, 29.2% of the variance) was composed of four items with girls (M = 8.88, SD = 2.04) endorsing items on this scale significantly more than boys (M = 8.34, SD = 2.06), t(225) = 2.40, p < .01. Test-retest reliability was r = .73, p < .01. The Anger Inhibition scale (eigenvalue = 1.95, coefficient alpha = .69, 17.7% of the variance) was composed of four items with no significant gender differences on this scale (M = 6.77, SD = 2.13). Test-retest reliability was s = .61, p < .01. The Anger Dysregulated-Expression scale (eigenvalue = 1.00, coefficient alpha = .68, 9.0% of the variance) was composed of three items with boys (M = 5.38, SD = 1.86) endorsing items on this scale significantly more than girls (M = 5.00, SD = 1.56), t(225) = 2.00, p < .05. Test-retest reliability was r = .62, p < .01. For more information on this scale, contact the authors.

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