Parental Emotion Invalidation, Emotion Inhibition, and Rumination in Relation to Adolescent Depression

Janelle Victoria Williams

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PARENTAL EMOTION INVALIDATION, EMOTION INHIBITION, AND RUMINATION, IN RELATION TO ADOLESCENT DEPRESSION

by

Janelle Victoria Williams

A Thesis
Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Science

Major: Psychology

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Abstract


This study tested a conceptual model which incorporated parental emotion invalidation of sadness, emotion inhibition, and rumination as contributing factors to depressive symptoms in adolescence. Adolescents completed questionnaires measuring their own emotion inhibition, rumination, and depression as well as their perceptions of their parents’ invalidating responses towards their sadness. Parents completed questionnaires measuring their perceptions of their invalidating responses towards their adolescents’ sadness, their perception of their adolescents’ sadness inhibition, and their perception of their adolescents’ depressive symptoms. Path analyses were conducted to examine the direct and indirect relations among the four variables. Results showed that emotion inhibition and rumination were associated with depression, but not each other. Parental emotion invalidation predicted emotion inhibition and depression, but not rumination. Findings suggest that parental emotion invalidation may be differentially related to different components of emotion regulation and that multiple components of emotion regulation should be considered in relation to adolescent depression.
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Parental Emotion Invalidation, Emotion Inhibition, and Rumination in Relation to Adolescent Depression

Research on child and adolescent depression indicates that (a) approximately 3% of children and 14% of adolescents meet diagnostic criteria for a depressive disorder, (b) between 10% and 30% of youth endorse subclinical yet significant symptoms of depression prior to the age of 18, and (c) individuals who experience problems with depression during childhood and adolescence are at high risk of suffering from depressive symptoms in adulthood (for discussion, see Hammen & Rudolph, 2003). Adolescent depression is associated with a wide range of social and academic difficulties such as poor peer and parental support and low grades (Jaycox et al., 2009). The high prevalence of depression during adolescence and its associated psychosocial problems has stimulated research designed to identify risk factors for this debilitating and often reoccurring problem.

A growing body of research has shown that a difficulty in regulating emotions effectively is a risk factor for adolescent depression (i.e., Silk, Steinberg, & Morris, 2003). Depression can be specifically characterized by difficulties in effectively down-regulating negative emotions or up-regulating and maintaining positive emotions (Cole, Michel, & Teti, 1994). According to Gratz and Roemer (2004), emotion regulation competency involves being able to use appropriate regulation strategies flexibly to modulate emotional arousal. Two emotion regulation strategies that have shown to be ineffective in modulating negative emotional arousal, as well as linked to depressive symptoms, are emotion inhibition (Gross & John, 2003) and rumination (Silk et al., 2003). Research also shows that these emotion regulation strategies are often positively
correlated with each other (e.g., Gross & John, 2003). Findings also suggest that an individual’s ability to regulate emotions is partly influenced by parents’ reactions to children’s negative emotions (Eisenberg, Cumberland, & Spinrad, 1998). Specifically, research shows that parents’ supportive (e.g., rewarding) responses to children’s negative emotions (e.g., sadness and anger) are linked to children’s emotion competency (Eisenberg et al., 1998), while parents’ negative responses (i.e., rejecting and neglectful) are associated with internalizing disorders such as depression (O’Neal & Magai, 2005). Linehan (1993) refers to unsupportive responses as being “emotionally invalidating,” in that these responses discourage the experience and expression of emotion.

Even though previous research has indicated that emotion inhibition, rumination, and parental emotion invalidation are all related to adolescent depression, there has not been any research on how all three factors are associated with depression in conjunction with each other. The purpose of the study was to investigate a conceptual model that incorporated parental emotion invalidation, emotion inhibition, and rumination in relation to adolescent depression.

**Conceptual Model**

As shown in Figure 1 in Appendix C, the conceptual model guiding the present study posits specific relations among several factors believed to influence the development of adolescent depression. The model was predominately influenced by Eisenberg and her colleagues’ (1998) heuristic model which proposed that emotion related parenting practices (e.g., parents’ reactions to children’s emotion) has important relations to children’s ability to regulate their emotions as well as child outcomes such as internalizing and externalizing disorders (Eisenberg et al., 1998). The model was also
heavily influenced by Gross’s (2001) process model of emotion regulation, which examines the inhibition of expressed emotion, and Nolen-Hoeksema (1991)’s Response Style Theory, which is a theory pertaining to rumination and its relation to depression. First, it was expected that parental emotion invalidation would have a direct effect on emotion inhibition and rumination (paths a and d, respectively). Second, it was hypothesized that emotion inhibition would influence rumination and depression (paths b and e, respectively). Third, rumination should be directly related to depression (path c).

Parents’ Responses to Children’s Emotions

Research on emotion socialization offers a valuable perspective on the development of children’s emotional and social competencies (e.g., Eisenberg, Fabes, & Murphy, 1996) as well as possible origins of psychopathology (O’Neal & Magai, 2005). Emotion socialization involves the processes by which parents or other caregivers socialize children’s understanding, experience, expression, and regulation of emotion (Eisenberg et al., 1998). There are both direct and indirect methods of emotion socialization. Methods include didactic instruction, modeling (e.g., Parke, 1994), and discussion of emotions (e.g., Gottman, Katz, & Hooven, 1996).

One emotion socialization parenting practice that has been heavily researched is parents’ responses to children’s emotional displays. Research has consistently shown that parents’ responses to children’s positive and negative emotions have a large effect on children’s ability to express and regulate their emotions (e.g., Eisenberg et al., 1998; Eisenberg et al., 2001). Supportive and problem-focused behavior in response to children’s displays of negative emotion have been linked to children’s competency in emotional and social functioning, whereas unsupportive reactions has been linked to
emotional over-arousal, dysregulated behavior, and avoidant coping responses (Eisenberg et al., 1998; Eisenberg et al., 1996). Although parental reactions to emotions might vary, Hunziker (1995) has identified five primary parental reactions to emotions that act as emotion socialization strategies for children, and are linked to either healthy emotional development or psychopathology (O’Neal & Magai, 2005). These include (a) reward (e.g., comforting, empathizing, and validating the child’s feelings), (b) punishment (e.g., discouraging and punishing child for expressions of emotion), (c) neglect (e.g., ignoring the child’s emotions or not being available to be aware of them), (d) overriding (e.g., dismissing the child’s emotions or distracting the child from them), and (e) magnification (e.g., responding to the child’s emotions by expressing the same emotion with equal or possibly stronger intensity). For the purposes of this study, the strategies of punishment and neglect were examined because these are the strategies most similar to emotional invalidation (see Krause, Mendelson, & Lynch, 2003).

When examining emotion socialization strategies, it is important to clarify which emotion is actually being socialized. According to functionalist theory (see Magai & McFadden, 1995) and discrete emotions theory (see Izard & Malatesta, 1987), specific emotions have specific interpersonal functions, and parents often use different strategies in response to children’s different emotions (Garside & Klimes-Dougan, 2002; Magai & O’Neal, 2005). For example, the expression of sadness often serves to elicit comfort, therefore, parents are more likely to reward sadness rather than punish it (Garside & Klimes-Dougan, 2002). However, when sadness is punished, children are more likely to exhibit internalizing behaviors (Magai & O’Neal, 2005). On the other hand, parents are more likely to punish anger rather than reward it (Garside & Klimes-Dougan, 2002).
According to Malatesta and Wilson (1988)’s theory, this differential reinforcement causes children to develop “surfeit biases” or “deficiency biases” which means children are more likely to overuse or underuse certain emotions such as sadness, which could then develop into depression.

*Parental Emotion Invalidation and Depression*

Even though there are some empirical findings that suggest different socialization strategies are differentially related to specific forms of psychopathology (e.g., O’Neal & Magai, 2005), there is a lack of empirical findings on the relationship between the socialization of sadness and depression. Krause and colleagues (2003) found that parental distress to negative emotion is linked to depression, however, the interpretation of these findings is hindered by their using negative emotions as global construct rather than specifying the negative emotion being socialized. The study (O’Neal & Magai, 2005) that has come the closest to examining the relation between the socialization of sadness and depression found a relation between the socialization of sadness and internalizing behaviors. They found that the neglect and punishment of sadness was associated with higher levels of internalizing behaviors. However, internalizing behaviors could refer to either depressive or anxious behaviors. Future empirical research needs to be done on how the socialization of sadness is specifically related to depressive symptoms.

*Emotion Inhibition*

Emotion inhibition can be conceptualized as encompassing both the inhibition of emotional expression as well as the suppression of emotional thoughts. However, in the study’s model, the construct of emotion inhibition will only refer to the inhibition of emotionally expressive behavior. Gross’s (2001) process model of emotion regulation
refers to this behavior as “expressive suppression.” In his model, Gross differentiates emotion regulation strategies according to the timeline of an unfolding emotional response (2001). The main two strategies he discusses are antecedent-focused and response-focused emotion strategies. Antecedent-focused strategies are those that attempt to modulate emotion before the emotional response has been activated, whereas response-focused emotion regulation strategies are those that attempt to influence one’s behavioral tendencies after the emotion has already been activated. The inhibition of emotionally expressive behavior can be conceptualized as a type of response-focused emotion regulation strategy in that it attempts to inhibit emotionally expressive behavior after the emotion has already been generated. Gross argues that inhibiting one’s expression of emotion is ineffective as an emotion regulation strategy because even though it is effective in decreasing the behavioral expression of negative emotion, it is not effective in the reducing the actual experience of negative emotion. In support of Gross’ (2001) process model, Gross and John (2003) have found that when individuals inhibit their expression of negative emotions, they often do not experience a decrease in these emotions. Instead, they often experience increased arousal (Gross & Levenson, 1997).

The inhibition of emotion as an emotion regulation strategy is associated with impairment in emotional and social competence (e.g., Gross & John, 2003). Studies have shown that the inhibition of emotionally expressive behavior is associated with less emotion awareness (Gross & John, 2003; Zeman et al., 2003) and impoverished emotional experience (Gross & Levenson, 1997; King, Emmons, & Woodley, 1992). Individuals who chronically use emotion inhibition also tend to ruminate more and feel unsuccessful in regards to controlling and altering their negative emotions (Gross & John,
Research shows that those who specifically inhibit their emotions of sadness also experience increased negativity as well as mood lability (Zeman et al., 2001). A person’s lack of expressivity has also been found to result in reduced social competence and functioning in terms of closeness to others and decreased social support (Gross & John, 2003; Srivastava, Tamir, McGonigal, John, & Gross, 2009). Srivastava and her colleagues (2009) gave three reasons as to why the habitual emotion inhibition leads to negative social consequences. First, it doesn’t allow the social partner of the inhibitor to know what he or she is feeling, and a number of important social processes rely on others knowing what the other person is feeling in order to facilitate social bonding. Second, because those who try to inhibit their emotional behavior are only partially successful in hiding their true emotions, people may view such people as being inauthentic and not interested in true intimacy (Srivastava et al., 2009). Third, inhibiting one’s emotional expressions appears to impose a cognitive load on its users (Gross & John, 2003; Richards & Gross, 2000), and perhaps this makes it difficult for the inhibitor to absorb information gathered in a social interaction, and thus respond appropriately to others (Srivastava et al., 2009). The majority of research done on emotion inhibition appears to be done with young adults (e.g., Gross & John, 2003) outside of the work done by Zeman and her colleagues (2001). There is a need to better understand the use of emotion inhibition in the adolescent population.

**Parental Emotion Invalidation and Emotion Inhibition**

The idea that parental unsupportive reactions to children’s negative emotions are linked with children’s inhibition of emotions is not new. Buck (1984), Linehan (1993), and John and Gross (2004) hypothesized that negative responses to emotional displays
results in children’s tendency to hide their expressions of emotion from others. However, there have been few empirical studies that have examined the relation between parental responses to emotion and emotion inhibition. A notable exception in this regard is a study done by Krause and colleagues (2003). Specifically, they examined whether childhood emotional invalidation (e.g., parental punishment, minimization, and distress/magnification) was associated with emotion inhibition in adulthood, and whether emotion inhibition mediated the relationship between childhood emotional invalidation and depression. They found that minimization of emotions and punishment of emotions were associated with emotion inhibition and that the relationship between the unsupportive reactions and depression was mediated by emotion inhibition.

*Emotion Inhibition and Depression*

One form of psychopathology that has been linked with the inhibited expression of emotion is depression (Gross & John, 2003; Zeman et al., 2001). Gross & John (2003) found that the inhibiting of one’s emotional expression was linked with higher scores of depression on three different measures. When specifically examining the relation between the inhibition of sadness and depression, Zeman and her colleagues (2001) found that children’s inhibition of sadness was associated with higher scores on the Child Depression Inventory. Another study (Keenan, Hipwell, & Babinski, 2009) found that among adolescent girls, the inhibited expression of sadness was more highly associated with depression than even the disinhibited expression of sadness. Disinhibited expressions are expressions that are intense and/or long-lasting, and are thought to reflect a core deficit in the modulation of emotion in response to environmental stimuli (Keenan et al., 2009).
There are several possible mechanisms by which emotion inhibition may be linked with the development of depression. Research (e.g., Gross & John, 2003) has shown that emotion inhibition is associated with decreased emotional and social competence. Being able to express one’s emotion in a culturally appropriate way is healthy to one’s social and emotional functioning (Cole et al., 1994). Those who inhibit their negative emotions appear to have a decreased ability in coping effectively with their negative emotions (Zeman et al., 2001). Emotion inhibition is associated with mood lability, and increased emotional arousal (Gross & Levenson, 1997; Zeman et al., 2001), which increases one’s chance of suffering from depression (Silk et al., 2003). According to Gross and John (2003), emotion inhibition is positively correlated with depression because those who inhibit their expression also tend to experience more dysphoria, receive less social support, and cope less effectively. All these factors increase one’s risk for depression (Nolen-Hoeksema & Morrow, 1991). Inhibiting one’s emotions also seems to reflect one’s sense of well-being on many different levels (Gross & John, 2003). Gross and John (2003) found that those who inhibit their emotions tended to feel less optimistic about their future, had lower self-esteem, felt less satisfaction with their life, felt less environmental mastery, less autonomy, less personal growth, less purpose in life, and less self-acceptance. Perhaps, when one does not hold oneself in high regard and feels pessimistic about their future, he or she will probably start to have feelings of hopeless and helplessness.

Rumination

Rumination can be defined as a mode of thinking that involves repetitively focusing on one’s depressed mood and its meanings, causes and consequences (Nolen-Hoeksema,
According to Nolen-Hoeksema’s (1991) Response Style Theory, there are individual differences in people’s propensity to engage in rumination in response to a depressed mood, and this propensity is relatively stable. In support of her theory, rumination’s stability has demonstrated significant retest reliability on the Response Styles Questionnaire (Just & Alloy, 1997; Nolen-Hoeksema, 2000). The construct of rumination can also be placed in the broader context of emotion regulation (Smith & Alloy, 2009). In Gross’s (2001) process model which categorizes each emotion regulation strategy according to which point it occurs in the emotion-generative process, rumination is conceptualized as an attentional deployment strategy. An attentional deployment strategy is an emotion regulation strategy used to direct one’s attention in a certain way in order to influence one’s emotions. Some examples are concentration and distraction. Rumination can be classified as an attentional deployment strategy in that it involves the repetitive direction of attention to one’s feelings of sadness and their consequences, and people claim to use it to cope and manage their depressed mood (Spasojevic & Alloy, 2001).

A growing body of research has indicated there are two subtypes of rumination: brooding and reflection (e.g., Treynor, Gonzalez, & Nolen-Hoeksema, 2003). The latter subtype of rumination is considered to be adaptive; whereas the former is regarded as maladaptive (Treynor et al., 2003). According to Treynor and her colleagues (2003), they defined brooding as passively focusing on the discrepancies between one’s current situation and one’s desired state. The second form of rumination, reflective pondering, involves reflectively and purposely “turning inward to engage in cognitive problem solving to alleviate one’s depressive symptoms” (Treynor et al., 2003, p. 256). According
to Nolen-Hoeksema and her colleagues (2008), when a ruminator passively focusing on one’s mood without taking any action, one may think one is gaining insight into his or her problems. However, the person is in actuality unconsciously avoiding the aversive situation, and is shirking his or her responsibility to take active steps to resolving the problem (Nolen-Hoeksema et al., 2008). Because of this, some researchers conceptualize rumination as being a form of avoidance coping (Smith & Alloy, 2009).

Age appears to play an important role in the usage of rumination as an emotion regulation strategy. In the multi-analytic analysis done by Rood and her colleagues (2009) the effect sizes for rumination were larger in adolescents in comparison to children. Research (e.g., Abela, Brozina, & Haigh, 2002) has shown that the use of rumination as a regulation strategy seems to increase from late childhood through adolescence. One suggestion is that children have yet to develop a coping style that is stable in nature (Abela et al., 2002).

Rumination as an emotion regulation strategy is associated with impairment in emotional and social competence. Rumination is associated with difficulties in expressing and identifying feelings, ineffective problem orientation, low inhibition of hostility, and high impulsivity (Ciarrochi et al., 2003). People who ruminate also tend to take a sense of helplessness over one’s circumstances, feel an undue responsibility for others’ emotional needs in close relationships and engage in more avoidance/escapist behavior (Nolen-Hoeksema et al., 2008).

**Parental Emotion Invalidation and Rumination**

Even though unsupportive parental responses to children’s negative emotions has been linked with avoidant coping strategies (Eisenberg et al., 1996), there have not been
many empirical studies that have specifically looked at parental responses in relation to the strategy of rumination. One study (Goldman, 2005) that did examine rumination in relation to parent responses found that maternal unsupportive reactions (punitive/neglectful) towards adolescents’ displays of sadness predicted higher adolescent rumination. Fathers’ unsupportive reactions in addition to magnifying/distress reactions also predicted higher adolescent rumination. Goldman (2005) suggested that one explanation for why parental socialization of emotion is linked to rumination is that parents’ unsupportive reactions result in children’s decreased sadness expression accompanied by increased negative arousal about which one might ruminate.

*Emotion Inhibition and Rumination*

Even though research has consistently linked both emotion inhibition and rumination to depression, not many empirical studies have looked at emotion inhibition and rumination in relation to each other. According to most of the research that has been done (Gross & John, 2003; King et al., 1992) emotional inhibition has been found to be positively correlated with rumination. Gross and John (2003) hypothesized that individuals who chronically inhibit their emotional expressions ruminate more when in a depressed mood because expressing emotions has the potential to change the environment and allow for social support. Thus if one suppresses his or her emotions, it becomes less likely that the situations that upset the individual will change for the better.

*Rumination and Adolescent Depression*

In the developmental research, both cross-sectional and longitudinal studies have been conducted in order to examine the relationship between rumination and adolescent depression. Conducting both types of studies is important, because according to theories
such as the Response Style Theory (Nolen-Hoeksema, 1991), rumination is associated 
with the maintenance as well as the exacerbation of depressive symptoms over time. In 
one meta-analytic study (Rood et al., 2009) that looked at both cross-sectional and 
longitudinal studies, a significant association was found between rumination and 
depression concurrently as well as longitudinally. The results from the meta-analytic 
review (Rood et al., 2009) also indicated that when the baseline levels of depressive 
symptoms were controlled for, there was still a strong association between rumination 
and depression, which is in agreement with Nolen-Hoeksema’s (1991) argument that 
rumination is a stable response style. In those studies (i.e., Burwell & Shirk, 2007) in 
which both subtypes of rumination were examined in association with depression, 
reflection was found to be positively associated with depressive symptoms concurrently, 
but not longitudinally. On the other hand, brooding was found to be positively correlated 
to depression concurrently as well as over time in adolescent samples (Burwell & Shirk, 
2007).

In the literature, several models have been introduced to explain the mechanisms by 
which rumination leads to depression. The most cited one is by Nolen-Hoeksema (1991). 
According to Nolen-Hoeksema (1991)’s Response Style Theory, rumination can lead to 
the exacerbation and the prolonging of depressive symptoms through heightening the 
effect of a depressed mood by the way of triggering negative thoughts and memories, 
interfering with problem solving (due to pessimistic or fatalistic thinking), and interfering 
with daily instrumental behavior, which then leads to increasing conditions of stress. Also 
chronic rumination is associated with the loss of social support, which will also increase 
one’s vulnerability to depression (Nolen-Hoeksema & Davis, 1999). All these factors
make it more likely that any initial feelings of a depressed mood will develop into a depressive episode (Nolen-Hoeksema et al., 2008).

Present Study

There is a need to increase the understanding of interrelated factors linked to the development of adolescent depression. The purpose of the study was to test a conceptual model for understanding depression, via path analysis, that incorporated parental emotion invalidation, emotion inhibition, and rumination. Separate path models for adolescent and parent- reports were conducted. A “combined” path model which averaged the scores from both the parent and adolescent reports was also examined.

It was hypothesized that parental emotion invalidation would have an indirect impact on depression by influencing emotion inhibition, which in turn influences rumination, which is most proximately related to adolescent depression. It was also hypothesized that emotion inhibition would directly and indirectly (via rumination) affect the level of depression experienced. Finally, it was hypothesized that rumination would influence the severity of depressive symptoms experienced directly.

Methodology

Participants and Procedures

Data for the present study were taken from a larger study that investigated emotion-related family processes. The study was approved by the Institutional Review Board at the University of Memphis. Participants were 77 adolescents and one of their parents/caregivers. Approximately 32% of the adolescent participants were boys and 79% of adolescent participants self-identified as African American. 91% of the parental participants were female caregivers to the adolescent, while the other 9% were male
caregivers. The mean age of the adolescent participants was 13.8 years, and the mean age
of the parental participants was 39.9 years. In terms of family structure, 29% of the
adolescent participants lived with both biological parents, 30% lived with a single
biological parent, 20% lived with their biological mother and stepfather, 4% lived with
their biological father and stepmother, 2% lived with their adoptive mother or adoptive
mother and father, and 4% lived with their grandparents or grandparent. In terms of the
maternal caregiver’s education, 8% did not graduate from high school, 17% received a
high school diploma or GED, 15% attended some college or received some vocational
training, 12% obtained a degree or certificate from an apprenticeship or vocational
school, 14% obtained a two year college degree, 17% received a four year college degree,
and 16% obtained a masters or doctorate degree. In regards to the paternal caregiver’s
education, 15% did not graduate from high school, 24% received a high school diploma
or GED, 21% attended some college or received some vocational training, 5% obtained a
degree or certificate from an apprenticeship or vocational school, 5% obtained a two year
college degree, 19% received a four year college degree, and 9% obtained a masters
degree or doctorate.

Participants were recruited through flyers at middle schools and community centers
in Shelby County. The flyers requested that interested students should have their parents
contact the research group for more information and schedule an appointment for the
assessment. During the assessment session, adolescents completed a questionnaire battery
administered by trained psychology graduate students in the University of Memphis
Child and Family Lab or at the community center either individually or in a group setting.
Parents completed a questionnaire battery administered by trained graduate students in
the lab or at home individually. Before completing the assessment batteries, the adolescents and the parents read and signed a consent form indicating their consent.

**Measures**

*Demographics.* Participants provided general demographic (e.g., biological sex, age, and race/ethnicity) and family background (e.g., maternal and paternal education level) information. (see Appendixes G and H).

*Parental emotion invalidation.* Parental emotional invalidation was assessed via adolescent (see Appendix I) and parental report (see Appendix J) using the Emotion Socialization Scale of the Emotions as a Child Scales (EAC; O’Neal & Magai, 2005) which measures five domains of socialization (punish, reward, neglect, override, and magnify) in relation to four different emotions (sadness, anger, fear, shame). For the purpose of the proposed study, only the punishment and neglect subscales were used, and these subscales were combined to make up the “parental emotion invalidation” scale. Also, only the 16 items related to sadness were used. For each item, adolescents were asked to rate on a 5-point Likert scale (Never to Very Often) how often a parent responds in a particular way to their emotions of sadness (e.g., When I’m sad, my parent comforts me). Parents were also asked to rate on a 5-point Likert scale on how they respond to their children’s displays of sadness (When my teen is sad, I get all upset). The “parental emotion invalidation” scale was adequate in terms of internal consistency for the adolescent ($\alpha = .61$) and parent ($\alpha = .77$) self-report.

*Emotion inhibition of sadness.* Adolescent sadness inhibition was assessed via parental report using the 8-item sadness inhibition subscale of *The Children’s Sadness Scale* (Zeman et al., 2001; see Appendix K). The parents were asked to indicate how
frequently their children hid or held in their feelings of sadness. The parents responded on a 4-point Likert scale (1 = almost never; 4 = almost always). The internal consistency for the sadness inhibition subscale was high ($\alpha = .89$).

*Emotion inhibition.* Adolescent emotion inhibition was measured using *The Emotional Expressivity Scale* (EES; Kring, Smith, & Neale, 1994; see Appendix L), a 17-item self-report measure of individual differences in the tendency to freely express emotions rather than mask them (Gross & John, 1998). The EES has been found to be highly reliable and internally consistent (Kring et al., 1994). The internal consistency for the EES was high ($\alpha = .83$).

*Rumination.* Five items from the self-report 10-item version (Treynor et al., 2003; see Appendix M) of the *Ruminative Responses Scale* (Nolen-Hoeksema & Morrow, 1991) was used to assess the adolescents’ tendency to ruminate in response to feelings of dysphoria. Even though the ten item measure consists of two subscales: reflective pondering and brooding, only the brooding subscale was used because brooding rather than reflective pondering is associated with depression longitudinally (Treynor et al., 2003). The brooding subscale consists of five questions that assess the degree to which individuals passively focus on their negative emotions and the causes of their negative mood. Adolescents rated on a 4-point Likert scale (0 = never; 4 = always) to what extent each statement reflected their own thinking patterns. The internal consistency for the subscale of brooding was .63.

*Adolescent Depression.* Adolescents completed the widely used, well-established 110-item *Youth Self Report* (YSR; Achenbach, 1991) to assess internalizing (e.g., anxiety, somatic complaints) and externalizing (e.g., aggressive) symptoms (See
Appendix N). Parents completed the 110-item Child Behavior Checklist (CBCL; Achenbach, 1991; see Appendix O) which is the parent equivalent of the YSR. Participants rated behaviors that occurred over the last 6 months on a 3 point scale (0 = not true; 2 = very true/often true; e.g., “I disobey at school,” “I am too fearful or anxious,” “I feel worthless or inferior”). For the purpose of this study, only questions that assessed anxious depression were used.

Results

Descriptive and Correlation Analyses

Descriptive statistics (means, standard deviations, ranges, skew, and kurtoses) and zero-order correlations among the study variables are shown in Table 1 in Appendix A. As shown, for the adolescent report measures, findings indicated significant associations between emotion invalidation and emotion inhibition, emotion inhibition and depression, emotion invalidation and depression, and rumination and depression. For the parent report measures, the only association that matched the hypothesized model was the significant association found between emotion inhibition and adolescent depression. Also, as shown in Table 1 in Appendix A, there were no significant associations between adolescent report measures and parent report measures outside of the two measures assessing the construct of adolescent inhibition of emotions.

To determine if sex was related to any of the study’s variables, point-biserial correlations were conducted. Findings indicated that emotion inhibition was the only variable for which the scores for boys and girls significantly differed. Boys reported significantly more emotion inhibition than girls in the sample, which is consistent with previous research (e.g., Gross & John, 2003).
Path Analyses

In order to test the indirect and direct relations between the variables of parental emotion invalidation, emotion inhibition, rumination, and adolescent depression, path analyses were conducted using MPlus Version 3.13 (Muthen & Muthen, 1998-2004). Maximum likelihood (ML) estimation was used. Separate path analyses were conducted for the adolescent-report, parent-report, and combined models. The adolescent-report model consisted of four variables: parental emotion invalidation as reported by the adolescent, general emotion inhibition as measured by The Emotional Expressivity Scale, which is adolescent self-report, rumination as reported by the adolescent, and adolescent depression as reported by the adolescent. For the parent-report model, the four variables included were parental emotion invalidation as reported by the parent, the inhibition of sadness as reported by the parent, rumination as reported by the adolescent, and adolescent depression as reported by the parent. Finally, for the combined model, the variables included were parental emotion invalidation, which was the average of the scores from both the adolescent-report and parent-report models, emotion inhibition, which was the average of the general emotion inhibition score and sadness inhibition score, rumination as reported by the adolescent, and adolescent depression, which was the average of the depression scores from the adolescent-report and parent-report models.

When testing a hypothesized model according to structural equation modeling, fit indices are used to evaluate whether a model is considered an acceptable fit. A model is considered an acceptable fit if the chi-square test is not significant (Schumacker & Lomax, 2004), the Root Mean Square Error of Approximation (RMSEA) is less than 0.05 (Schumacker & Lomax, 2004) the Standardized Root Mean Square Residual (SRMR) is
less than 0.08 (Browne & Cudeck, 1993), and the Comparative Fit Index (CFI) exceeds .93 (Byrne, 1994).

For the adolescent-report model (see Figure 2 in Appendix D), findings indicated that the model provided an excellent fit to the data ($\chi^2 [1], N = 77) = 0.001, p = .97; RMSEA = .00; SRMR = .00; CFI = 1.0. This model explained 6% of the variance in emotion inhibition, 25% of the variance in depression, and 0% of the variance in rumination. With regard to specific parameters (see Figure 2), emotion invalidation of sadness was associated with emotion inhibition ($\beta = .25, p < .05$). More specifically, parents who neglected or punished their adolescents’ expressions of sadness were more likely to have adolescents who inhibited their expressions of emotion. Adolescents’ inhibition of emotion was associated with symptoms of depression ($\beta = .22, p < .05$). In other words, adolescents who inhibited their emotional expressions were more likely to have symptoms of depression. Adolescents’ rumination was also associated with symptoms of depression ($\beta = .31, p < .01$). In other words, adolescents who used rumination as an emotion regulation strategy were more likely to experience depressive symptoms. Parents’ emotional invalidation of adolescents’ sadness also was associated with symptoms of adolescent depression ($\beta = .29, p < .05$). In other words, when parents neglected or punished their adolescents’ expression of sadness, the adolescents were more likely to have symptoms of depression. No statistically significant relationship was found between emotion invalidation and rumination ($\beta = -.04, n. s.$).

Indirect effects were examined to test whether emotion inhibition mediated the relation between emotion invalidation and symptoms of depression. Findings indicated that there was no statistically significant indirect effect between parental invalidation of
sadness and depression via emotion inhibition (β = .06, n. s.). There was also no statistically significant indirect effect between parental invalidation of sadness and depression via rumination (β = -.01, n. s.).

For the parent-report model (see Figure 3 in Appendix E), findings indicated that the model provided a relatively good fit to the data ($\chi^2 [1], N = 77) = 1.587, p = .21; RMSEA = .00; SRMR = .05; CFI = 1.0$. This model explained 3% of the variance in emotion inhibition, 11% of the variance in depressive symptoms and 1% of the variance in rumination. With regard to specific parameters, emotion invalidation of sadness was not associated with emotion inhibition (β = -.16, n. s.). There was no statistically significant relation found between emotion invalidation and rumination (β = -.10, n. s.). However, significant relations were found between emotion inhibition and depression (β = .29, p < .05) and emotion invalidation and depression (β = .22, p < .05). Contrary to predictions, rumination was not associated with depression (β = .05, n. s.). When indirect effects were examined, there were no significant effects found from parental invalidation of sadness to depression through emotion inhibition (β = -.05, n. s.) nor through rumination (β = -.01, n. s.) as contrary to expectations.

For the mixed adolescent and parent-report model (see Figure 4 in Appendix F), findings indicated that the model provided a good fit to the data ($\chi^2 [1], N = 77) = 0.022, p = .88; RMSEA = .00; SRMR = .06; CFI = 1.0$. This model explained 2% of the variance in emotion inhibition, 24% of the variance in anxious depression, and 0% of the variance in rumination. With regard to specific parameters (see Figure 2), emotion invalidation of sadness was not related to emotion inhibition (β = .15, n. s.). No statistically significant relation was found between emotion invalidation and rumination
(β = -.09, n. s.) or emotion inhibition and rumination (β = .02, n. s.). However, adolescent emotion inhibition was related to depression (β = .20, p < .05) in accordance with the hypothesized model. Adolescents’ rumination was also associated with symptoms of depression (β = .34, p < .01). Parents’ emotional invalidation of adolescents’ sadness also was related to symptoms of adolescent depression (β = .30, p < .05).

When indirect effects were examined, findings indicated that there was no statistically significant indirect effect between parental invalidation of sadness and depression via emotion inhibition (β = .03, n. s.). There was also no statistically significant indirect effect between parental invalidation of sadness and depression via rumination (β = -.3, n. s.).

Post-Hoc Analyses

Follow-up analyses which results are shown in Table 2 in Appendix B, were also conducted to see if there were any gender differences in correlations between some of the study variables. For the adolescent-report measures, emotion invalidation was linked with emotion inhibition for adolescent girls (r = .30, p < .05), but not their male counterparts (r = .15, n. s.). However, in regards to the relation between emotion inhibition and rumination, the relationship was more significant for the boys (r = .36, p < .10) than for the girls (r = -.18, n. s.). Finally, there was a significant association between rumination and depressive symptoms for boys (r = .43, p < .05), but not for girls (r = .24, n. s.) according to the adolescent-report measures.
Discussion

Major Findings and Implications

The present study tested a conceptual model that incorporated parental emotion invalidation, emotion inhibition, and rumination as risk factors for adolescent depression. This study adds to the current literature by examining two aspects of emotion regulation simultaneously in relation to adolescent depression. The study also investigated predictors of emotion regulation, which has recently become a topic of interest in the literature. It is also one of few studies that focuses on emotion socialization during the period of adolescence.

There were several important findings in the present study. One important finding was that parental emotion invalidation, emotion inhibition, and rumination all made unique contributions to the prediction of adolescent depression. In other words, each one of these variables was significantly associated with adolescent depression. This discovery signifies that parental emotion invalidation, emotion inhibition, and rumination should all be considered relevant when investigating a potential model of adolescent depression that involves these three constructs. The discovered association between parental emotion invalidation and adolescent depression is consistent with the existing literature that has found that the parental invalidation of sadness is strongly related to internalizing symptoms in adolescents (Magai & O’Neal, 2005). This finding also builds upon that literature by linking the invalidation of sadness specifically with the symptoms of adolescent depression.

In the current study, the inhibited expression of sadness was associated with depressive symptoms. This finding is important because the majority of research
conducted on the relation between the inhibition of sadness and depression has been done on children rather than adolescents (Zeman et al.; 2001). The inhibition of general emotion was also linked to depressive symptoms. This finding contributes to the growing literature showing the association of emotion inhibition and depression in adolescents (e.g., Gross & John, 2003).

The brooding subtype of rumination was also found to be significantly associated with depressive symptoms. This finding adds to the current knowledge by linking the brooding subtype of rumination specifically to adolescent depression (e.g., Burwell & Shirk, 2007). This study’s finding also extends the existing literature by linking brooding with depression in a predominately African American adolescent sample. Expanding the literature by using a predominately African American sample is important in that most studies have looked at predominately Caucasian American samples, and it is important to examine these constructs across diverse ethnic groups. These results suggest that rumination as an emotion regulation strategy is one possible risk factor of depression among adolescents.

Another important finding was that parental emotion invalidation and emotion inhibition were strongly related. This finding is consistent with previous literature that delineates this association between parental emotion invalidation and emotion inhibition (Krause et al., 2003). The finding also adds to the literature by linking emotion invalidation with emotion inhibition in an adolescent as well as predominately African-American sample. Perhaps this relation occurs because children might begin inhibiting their emotions as a way to protect themselves from future negative reactions of their parents if they have received unsupportive reactions in the past (Krause et al., 2003). For
example, a child might suppress his or her feelings of sadness if his or her parents have reacted to displays of sadness with mocking in the past, and the child does not want it experience this mocking in the future. Children might also suppress their emotions because they accept their parents unsupportive responses to their emotions as valid, and therefore their emotions as wrong and not worthy of expression (Gottman, 1997).

In contrast to Goldman’s (2005) finding, no significant relation was found between emotion invalidation and rumination. One interpretation of why no significant relationship was found could be due to the heterogeneous nature of our sample in terms of family structure. In Goldman’s study, the large majority of the adolescents currently lived with their biological parents, whereas in our study, only a quarter of our sample did, with the majority of children living with their biological mothers. When just analyzing the data of the adolescents who lived with their biological parents, a significant relationship was found between emotion invalidation and rumination (r = .43, p < .05). This finding is consistent with that of Goldman’s study. Perhaps a significant relation was not found between emotion invalidation and rumination for those adolescents who lived with just their biological mothers because mothers who are single are more likely to encourage more active ways of coping than the passive style of rumination because of the many demands they have to face in being single parents.

Even though both emotion inhibition and rumination were found to be related to depression in adolescents, they were not correlated with each other. Perhaps the relationship between emotion inhibition and rumination was not as strong as originally hypothesized because each may involve different emotional competencies. Emotion inhibition involves the ability to actively modulate one’s behavioral reactions to one’s
emotions in the presence of others while rumination involves a passive self-focusing on one’s symptoms, causes, and consequences of one’s depressed mood. Thus, one could argue that emotion inhibition as a regulation strategy requires much more active cognitive control than does the strategy of rumination even though research shows that both strategies deplete mental resources and negatively affect one’s memory.

Another reason why no relation was found could be due to limitations in methodology in regards to the measures used to measure the construct of emotion inhibition. The limitation of the Emotion Expressivity Scale was that it did not specify strongly with rumination, which also involves sadness. As for the CSAMS, which did specifically measure the inhibition of sadness, the measure was parent-report rather than child report, which is a problem in that the literature shows that children are the best at identifying their own emotions.

One final possibility is that current measures of emotion inhibition do not tease out the component of emotion inhibition that is the most strongly related to rumination (e.g., problems with resource allocation). As mentioned earlier, emotion inhibition requires a lot of effort on the part of the inhibitor by imposing a cognitive load on its users. The development of new measures may be needed to test whether the resource allocation piece of emotion inhibition will cause effortful emotion inhibition and rumination to become more correlated rather than less so.

Surprisingly, findings suggested that there was not a significant indirect pathway from emotion invalidation to depression via emotion inhibition. In other words, emotion inhibition did not mediate the relation between emotion invalidation and depression. This finding is inconsistent with previous literature that links emotion inhibition as mediating
the relationship between negative parental socialization of emotion and internalizing disorders such as depression, anxiety, and eating disorders (Krause et al., 2003). One explanation for why this happened could be due to the Emotional Expressivity Scale not being emotion-specific. If this emotion inhibition scale was specific to sadness, perhaps its association with emotion invalidation of sadness would have been stronger; thus making it more likely that a significant indirect relationship existed.

The aforementioned findings were based mainly via adolescent report model. The parent report findings were similar in some ways in comparison to the adolescent findings, but different in others. The two aspects that were consistent with each report were that emotion inhibition was associated with depression, and that emotion invalidation was linked to depression. However, emotion invalidation was not linked with emotion inhibition nor was rumination linked with depression according to the parent report findings. Parental report emotion invalidation was also not associated with adolescent report emotion invalidation. Perhaps this finding was also somewhat due to parents’ reports of their responses to their children’s expressions often being influenced by what they think they should do rather than what they actually do (Klimes-Dougan & Zeman, 2007).

Limitations and Recommendations for Future Research

The present study had a couple other limitations that have not been mentioned previously. One limitation was that the sample was heterogeneous in terms of family composition. In other words, most families did not consist of biological parents being married to each other, but instead consisted of many single mothers, one parent and a step-parent, and one or both grandparents. Another limitation was that the design of the
study was cross-sectional rather than longitudinal. If the design was longitudinal, it would be possible to test whether the different constructs examined were actual predictors of one another. Future research should thus incorporate this type of experimental design. Thirdly, even though it was strength of study to have such a large African-American sample, it would have been better to have a notable representation from other ethnic groups as well in order to compare the results with those results from previous studies, as well as compare the results among the study’s ethnic groups. Future research should thus have a notable representation from several different ethnic groups in order to achieve this goal.

Finally, if there had been a larger sample of boys, then it would have been possible to test for gender as a moderator between variables in the study. Gender differences were apparent when examining the relationship between parental emotion invalidation and emotion inhibition, the relationship between rumination and depression, and the relationship between emotion inhibition and rumination according to sex. However, because the study’s sample was not large enough, it’s hard to draw any firm conclusions from these results. Future research should incorporate using larger sample sizes for this purpose. Interestingly, though, there was an almost significant relationship between emotion inhibition and depression for the boys, but not the girls. Even though these results are in contradiction with Gross and John (2003)’s study which found that there is a significant relationship between the two constructs among a sample of both men and women, they are not in contradiction with one study that found no significant relationship among a sample of all women (Moore et al., 2008). Perhaps, emotion inhibition has a stronger relationship with rumination among boys than girls because
emotion expression is less likely to lead to social support among boys due to gender role expectations, whereas people’s reactions to girls’ displays of sadness may be more variable.

**Conclusion**

The present study’s primary aim was to test a conceptual model that examined the complex relations among emotion socialization, emotion regulation, and adolescent depression. The current study aimed to examine multiple components of emotion regulation in relation to adolescent depression as well as each other. The study also incorporated emotion socialization as an important contributor to emotion regulation as well as depressive outcomes. The study suggests that even though rumination and emotion inhibition are both related to depression, they are not related to each other, and that emotional invalidation is differentially related to emotion inhibition in comparison to rumination. The reasons for these results are not readily apparent, however, the next step would be to tease out the factors that make up emotion inhibition and rumination. Although more research is needed to examine all the relations between all the constructs of interest, the study provides a useful framework for studying multiple components of emotion regulation, emotion socialization and adolescent depression. The contribution of this study is significant in that it supports existing research as well as provides initial empirical support for the relationship between specific forms of emotion socialization and adolescent depression.
References


Cole, P., Michel, M., & Teti, L. (1994). The development of emotion regulation and


Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26,* 41-54.


Appendix A

Table 1

*Descriptive Statistics and Zero-Order Correlations among Measures*

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<td>.31**</td>
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<td>.11</td>
<td>-.16</td>
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<td>-1.32</td>
<td>-1.55</td>
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*Note. N = 77. *p < .05. **p < .01. +p < .10.*
### Appendix B

**Table 2**

*Zero-Order Correlations among Measures Computed Separately for Boys and Girls*

<table>
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<td>.12</td>
<td>-.19</td>
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<tr>
<td>6. Sadness Inhibition</td>
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<td>.19</td>
<td>.23</td>
<td>-.04</td>
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<td>.08</td>
<td>-.11</td>
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*Note. N=77. *p < .05. **p < .01. +p <.10. Values above diagonal represent zero-order correlations for girls. Values below diagonal represent zero-order correlations for boys.*
Figure 1. Conceptual model: Influence of parental emotion invalidation, emotion inhibition, and rumination on adolescent depression.
Figure 2. Adolescent-report model: Influence of parental emotion invalidation, emotion inhibition, and rumination on adolescent depression.

Note. *p < .05. $\chi^2 [1, n = 77] = 0.001, p = .98; CFI = 1.0; RMSEA Est. = .00; SRMR = .00.$
Figure 3. Parent-report model: Influence of parental emotion invalidation, emotion inhibition, and rumination on adolescent depression.

Note. Rumination variable was adolescent-report.

*p < .05. χ² [1, n = 77] = 1.587, p = .21; CFI = 1.0; RMSEA Est. = .00; SRMR = .05.
Appendix F

Figure 4. Mixed adolescent and parent-report model: Influence of parental emotion invalidation, emotion inhibition, and rumination on adolescent depression.

Note. Rumination variable was adolescent-report.

*p < .05. \( \chi^2 [1, n = 77] = 0.022, p = .88; \) CFI = 1.0; RMSEA Est. = .00; SRMR = .06.
Appendix G

Adolescent Demographic Information

Please answer the questions below.

1. Biological Sex
   A. Male
   B. Female

2. Current Age

3. Race/Ethnicity (mark only one)
   A. Asian or Pacific Islander
   B. Black/African American
   C. Caucasian
   D. Hispanic
   E. Native American
   F. Biracial or Multiracial - Please specify: __________________
   G. Other - Please specify: __________________

4. Growing up, who was your primary FEMALE caregiver (mark only one)?
   A. Biological mother
   B. Stepmother
   C. Adoptive mother
   D. Grandmother
   E. I didn’t have a female caregiver
   F. Other: __________________

5. Growing up, who was your primary MALE caregiver (mark only one)?
   A. Biological father
   B. Stepfather
   C. Adopted father
   D. Grandfather
   E. I didn’t have a male caregiver
   F. Other: __________________

6. Mother (maternal caregiver) education level
   A. Did not graduate high school
   B. Received high school diploma/GED
   C. Attended some college or vocational training (did not complete)
   D. Obtained degree or certificate from apprenticeship or vocational school
   E. Obtained two year college degree
   F. Obtained four year college degree
   G. Obtained masters or doctorate degree
   H. Don’t know
Appendix G

7. Father (paternal caregiver) education level
   A. Did not graduate high school
   B.Received high school diploma/GED
   C. Attended some college or vocational training (did not complete)
   D. Obtained degree or certificate from apprenticeship or vocational school
   E. Completed two year college
   F. Completed four year college
   G. Obtained masters or doctorate degree
   H. Don’t know

8. Which of the following best describes the relationship between your biological parents?
   A. Married to each other
   B. Divorced from each other (your age when they divorced _______)
   C. Currently seeking a divorce
   D. Separated, but living together (your age when they separated _______)
   E. Separated, living apart (your age when they separated _______)
   F. Never married, but still together
   G. Never married, not still together
   H. Other: _____________________

9. Growing up, I lived with my ______________________ for most of my life.
   A. Biological parents
   B. Biological mother
   C. Biological father
   D. Biological mother and stepfather
   E. Biological father and stepmother
   F. Adoptive mother and father
   G. Adoptive mother
   H. Adoptive father
   I. Grandparents or grandparent
   J. Other: _____________________

If your parents are divorced or separated, please answer the following question (If your parents are still together, you may skip this question).

10. How often did you see the parent you did not live with?
    A. Once a week or more
    B. A few times a month
    C. A few times a year
    D. Less than once a year
    E. Never
Appendix H

Parent Demographic Information

Please answer the questions below.

1. What is your relationship to the teenager?
   A. Biological mother
   B. Biological father
   C. Adoptive mother
   D. Adoptive father
   E. Stepmother
   F. Stepfather
   G. Grandmother
   H. Grandfather
   I. Other: ______________________

2. Your Biological Sex
   A. Male
   B. Female

3. Your Age __________

4. Who is the primary FEMALE caregiver of your teenager (mark one)?
   A. Biological mother
   B. Stepmother
   C. Adoptive mother
   D. Grandmother
   E. My teenager doesn't have a female caregiver
   F. Other: _________________

5. Who is the primary MALE caregiver of your teenager (mark one)?
   A. Biological father
   B. Stepfather
   C. Adopted father
   D. Grandfather
   E. My teenager doesn't have a male caregiver
   F. Other: _________________

6. Your Race/Ethnicity (mark only one)
   A. Asian or Pacific Islander
   B. Black/African American
   C. Caucasian
   D. Hispanic
   E. Native American
   F. Middle Eastern
   G. Biracial or Multiracial - Please specify: _________________
Appendix H

H. Other - Please specify: _________________

7. Your TEENAGER’S Race/Ethnicity (mark only one)
   A. Asian or Pacific Islander
   B. Black/African American
   C. Caucasian
   D. Hispanic
   E. Native American
   F. Middle Eastern
   G. Biracial or Multiracial - Please specify: _________________
   H. Other - Please specify: _________________

8. Relationship status between you and your teenager’s other biological parent?
   A. Married
   B. Divorced (year divorced ________________)
   C. Separated (year separated ________________)
   D. Never married, but still together
   E. Never married, not still together (year split up __________)
   F. Widowed
   G. Other: _________________

   A. Married
   B. Remarried (year remarried ________________)
   C. Single, but in a romantic relationship (length of current relationship _____)
   D. Single
   E. Other: _________________

10. Your education level:
    A. Did not graduate high school
    B. Received high school diploma/GED
    C. Attended some college or vocational training (did not complete)
    D. Obtained degree or certificate from apprenticeship or vocational school
    E. Obtained two year college degree
    F. Obtained four year college degree
    G. Obtained masters or doctorate degree

11. Your teenager’s other parent’s education level:
    A. Did not graduate high school
    B. Received high school diploma/GED
    C. Attended some college or vocational training (did not complete)
    D. Obtained degree or certificate from apprenticeship or vocational school
    E. Obtained two year college degree
    F. Obtained four year college degree
Appendix H

G. Obtained masters or doctorate
H. Don’t know

12. Who does your teenager live with currently?
   A. Both biological parents
   B. Biological mother
   C. Biological father
   D. Biological mother and stepfather
   E. Biological father and stepmother
   F. Adoptive mother and father
   G. Adoptive mother
   H. Adoptive father
   I. Grandparents or grandparent
   J. Other: _____________________

If you and your teenager's other parent are divorced or separated, please answer the following question (If you are still together, you may skip this question).

13. How often does your teenager see his/her other parent?
   A. Once a week or more
   B. A few times a month
   C. A few times a year
   D. Less than once a year
   E. Never
Appendix I

Adolescent-Report Parental Responses

A parent can respond to a child’s emotions in many different ways. For each item, please indicate how often your parent/caregiver responds to your emotions in the way described.

Answer these questions about the parent/caregiver who brought you here today.

When you feel SAD or DOWN, how often does your parent respond in these ways?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Not Very Often</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I am sad, my parent asks me about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. When I am sad, my parent tells me not to worry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. When I am sad, my parent helps me deal with the issue that made me sad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. When I am sad, my parent gets sad, too.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. When I am sad, my parent tells me that I am acting younger than my age.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. When I am sad, my parent understands why I am sad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. When I am sad, my parent tells me to cheer up.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. When I am sad, my parent is usually not around.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. When I am sad, my parent lets me know that they do NOT like me being sad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never</td>
<td>Not Very Often</td>
<td>Sometimes</td>
<td>Often</td>
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<tr>
<td>10. When I am sad, my parent buys me something I like.</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. When I am sad, my parent jokes with me about it.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. When I am sad, my parent comforts me.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. When I am sad, my parent usually doesn't notice.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. When I am sad, my parent gets all upset.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. When I am sad, my parent ignores me.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. When I am sad, my parent gives me a disgusted look.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix J

Parent-Report Parental Responses

A parent can respond to a child’s emotions in many different ways. For each item, please indicate how often you respond to your teen's emotions in the way described.

When your teen feels **SAD** or **DOWN**, how often do you respond in these ways?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Never</th>
<th>Not Very Often</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When my teen is sad, I ask him/her about it.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. When my teen is sad, I tell him/her not to worry.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. When my teen is sad, I help him/her deal with the issue that made them sad.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. When my teen is sad, I get sad, too.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. When my teen is sad, I tell him/her that they are acting younger than their age.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. When my teen is sad, I understand why they are sad.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. When my teen is sad, I tell them to cheer up.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. When my teen is sad, I am usually not around.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. When my teen is sad, I let him/her know that I do NOT like them being sad.</td>
<td></td>
<td>1</td>
<td>2</td>
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<td>5</td>
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</tbody>
</table>
### Appendix J

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Never</th>
<th>Not Very Often</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. When my teen is sad, I buy him/her something they like.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. When my teen is sad, I joke with him/her about it.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. When my teen is sad, I comfort him/her.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. When my teen is sad, I usually don't notice.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. When my teen is sad, I get all upset.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. When my teen is sad, I ignore him/her.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. When my teen is sad, I give him/her a disgusted look.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix K

**Emotion Expression Scale**

Directions: Please rate the sentences below for how often each was true of your child’s emotional expression in the past year.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My child hid his/her sadness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. My child was afraid to show his/her sadness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. My child held his/her sad feelings in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My child would get sad inside, but didn’t show it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. My child hid his/her anger</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. My child was afraid to show his/her anger.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. My child held his/her angry feelings in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. My child would get angry inside, but didn’t show it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix L

Emotion Expressiveness Scale

We would like to ask you some questions about your emotional life, in particular, how you express your emotions. For each item, please answer using the following scale:

1-------------------2-------------------3-------------------4-------------------5------------------6
Never                                                                                                              Always

1. _____ I think of myself as emotionally expressive.
2. _____ People think of me as an unemotional person.
3. _____ I keep my feelings to myself.
4. _____ I am often considered indifferent by others.
5. _____ People can read my emotions.
6. _____ I display my emotions to other people.
7. _____ I don't like to let other people see how I'm feeling.
8. _____ I am able to cry in front of other people.
9. _____ Even if I am feeling very emotional, I don't let others see my feelings.
10. _____ Other people aren't easily able to observe what I'm feeling.
11. _____ I am not very emotionally expressive.
12. _____ Even when I'm experiencing strong feelings, I don't express them outwardly.
13. _____ I can't hide the way I'm feeling.
14. _____ Other people believe me to be very emotional.
15. _____ I don't express my emotions to other people.
16. _____ The way I feel is different from how others think I feel.
17. _____ I hold my feelings in.
Appendix M

Thinking Scale

People think and do many different things when they feel sad, blue, or depressed. Please indicate a number for if you ever, sometimes, often, or always think or do each one when you feel down, sad, or depressed. Please indicate what you generally do, not what you think you should do.

1. _____ Think “What am I doing to deserve this?”
2. _____ Analyze recent events to try to understand why you are depressed
3. _____ Think “Why do I always react this way?”
4. _____ Go away by yourself and think about why you feel this way
5. _____ Write down what you are thinking and analyze it
6. _____ Think about a recent situation, wishing it had gone better
7. _____ Think “Why do I have problems other people don’t have?”
8. _____ Think “Why can’t I handle things better?”
9. _____ Analyze your personality to try to understand why you are depressed
10. _____ Go someplace alone to think about your feelings
Appendix N
YSR

Below is a list of items that describe kids and teenagers. For each item that describes you now or within the past 6 months, please circle the 2 if the item is very true or often true of you. Circle the 1 if the item is somewhat or sometimes true of you. If the item is not true of you, circle the 0.

0=Not True (as far as you know) 1=Somewhat or Sometimes True 2=Very True or Often True

1. I act too young for my age
2. I drink alcohol without my parents' approval
   (describe): __________________________
3. I argue a lot
4. I fail to finish things I start
5. There is very little that I enjoy
6. I like animals
7. I brag
8. I have trouble concentrating or paying attention
   (describe): __________________________
9. I can't get my mind off certain thoughts; obsessions
   (describe): __________________________
10. I have trouble sitting still
11. I'm too dependent on adults
12. I feel lonely
13. I feel confused or in a fog
14. I cry a lot
15. I am pretty honest
16. I am mean to others
17. I daydream a lot
18. I try to get a lot of attention
19. I destroy my own things
20. I destroy things belonging to others
21. I disobey my parents
22. I disobey at school
23. I don't eat as well as I should
24. I don't get along with other kids
25. I don't feel guilty after doing something I shouldn't
26. I am jealous of others
27. I break rules at home, school, or elsewhere
28. I am afraid of certain animals, situations, or places, other than school (describe): ______
29. I am afraid of going to school
30. I am afraid I might think or do something bad
31. I feel that I have to be perfect
32. I feel that no one loves me
33. I feel that others are out to get me
34. I feel worthless or inferior
35. I accidentally get hurt a lot
36. I get in many fights
37. I get teased a lot
38. I hang around with kids who get in trouble
39. I hear sounds or voices that other people think aren't there (describe): _____________
40. I act without stopping to think
41. I would rather be alone than with others
42. I lie or cheat
43. I bite my fingernails
44. I am nervous or tense
45. Parts of my body twitch or make nervous movements (describe): __________________
46. I have nightmares
47. I am not liked by other kids
48. I can do certain things better than most kids
49. I am too fearful or anxious
50. I feel dizzy or lightheaded
51. I feel too guilty
52. I eat too much
53. I feel overtired without good reason
54. I am overweight
55. I physically attack people
56. I pick my skin or other parts of my body (describe): __________________________
57. I can be pretty friendly
58. I like to try new things
59. My school work is poor
60. I am poorly coordinated or clumsy
### Appendix N

<table>
<thead>
<tr>
<th>0 = Not True (as far as you know)</th>
<th>1 = Somewhat or Sometimes True</th>
<th>2 = Very True or Often True</th>
</tr>
</thead>
<tbody>
<tr>
<td>61. Physical problems without known medical cause:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Aches or pains (not stomach or headaches)</td>
<td></td>
<td></td>
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<tr>
<td>b. Headaches</td>
<td></td>
<td></td>
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<tr>
<td>c. Nausea, feels sick</td>
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<tr>
<td>d. Problems with eyes (not if corrected by glasses) (describe): ____________________</td>
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<tr>
<td>e. Rashes or other skin problems</td>
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<tr>
<td>f. Stomachaches</td>
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<tr>
<td>g. Vomiting, throwing up</td>
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<tr>
<td>h. Other (describe): ______________</td>
<td></td>
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</tr>
<tr>
<td>62. I would rather be with older kids than kids my own age</td>
<td></td>
<td></td>
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<tr>
<td>63. I would rather be with younger kids than kids my own age</td>
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<tr>
<td>64. I refuse to talk</td>
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<tr>
<td>65. I repeat certain acts over and over; compulsions (describe): ________________</td>
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<tr>
<td>66. I run away from home</td>
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<tr>
<td>67. I scream a lot</td>
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<tr>
<td>68. I am secretive or keep things to myself</td>
<td></td>
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</tr>
<tr>
<td>69. I see things that other people don't think are there (describe): ________________</td>
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<tr>
<td>70. I am self-conscious or easily embarrassed</td>
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<tr>
<td>71. I set fires</td>
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<td>72. I can work well with my hands</td>
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<td>73. I show off or clown</td>
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<td></td>
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<tr>
<td>74. I am too shy or timid</td>
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<tr>
<td>75. I sleep less than most kids</td>
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<td></td>
</tr>
<tr>
<td>76. I sleep more than most kids during day and/or night (describe): ________________</td>
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<tr>
<td>77. I am inattentive or easily distracted</td>
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<tr>
<td>78. I have a speech problem (describe): ______</td>
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<tr>
<td>79. I stand up for my rights</td>
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<tr>
<td>80. I steal at home</td>
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<tr>
<td>81. I steal from places other than home</td>
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<tr>
<td>82. I store up too many things I don't need (describe): ____________________</td>
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<tr>
<td>83. I do things other people think are strange (describe): ____________________</td>
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<tr>
<td>84. I have thoughts that other people would think are strange (describe): ________________</td>
<td></td>
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<tr>
<td>85. I am stubborn</td>
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<td></td>
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<tr>
<td>86. My mood or feelings change suddenly</td>
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<tr>
<td>87. I enjoy being with people</td>
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<tr>
<td>88. I am suspicious</td>
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<td></td>
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<tr>
<td>89. I swear or use dirty language</td>
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<td></td>
</tr>
<tr>
<td>90. I like to make others laugh</td>
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<td></td>
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<tr>
<td>91. I talk too much</td>
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<td></td>
</tr>
<tr>
<td>92. I tease others a lot</td>
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<tr>
<td>93. I have a hot temper</td>
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<td></td>
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<tr>
<td>94. I think about sex too much</td>
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<td></td>
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<tr>
<td>95. I threaten to hurt people</td>
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<td></td>
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<tr>
<td>96. I like to help others</td>
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<td></td>
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<tr>
<td>97. I smoke, chew, or sniff tobacco</td>
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<td></td>
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<tr>
<td>98. I have trouble sleeping (describe): ______</td>
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<tr>
<td>99. I cut classes or skip school</td>
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<td></td>
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<tr>
<td>100. I don't have much energy</td>
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<td></td>
</tr>
<tr>
<td>101. I am unhappy, sad, or depressed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102. I am louder than other kids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103. I use drugs for nonmedical purposes (don't include alcohol or tobacco) (describe): ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>104. I like to be fair to others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105. I enjoy a good joke</td>
<td></td>
<td></td>
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<tr>
<td>106. I like to take life easy</td>
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<tr>
<td>107. I try to help other people when I can</td>
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<tr>
<td>108. I wish I were of the opposite sex</td>
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<tr>
<td>109. I keep from getting involved with others</td>
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<tr>
<td>110. I worry a lot</td>
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</tbody>
</table>
Appendix O

CBCL

Below is a list of items that describe children and youths. For each item that describes your child now or within the past 6 months, please circle the 2 if the item is very true or often true of your child. Circle the 1 if the item is somewhat or sometimes true of your child. If the item is not true of your child, circle the 0. Please answer all items as well as you can, even if some do not seem to apply to your child.

<table>
<thead>
<tr>
<th>Item</th>
<th>Circle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acts too young for his/her age</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>Drinks alcohol without parents’ approval (describe):</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Argues a lot</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Fails to finish things he/she starts</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>There is little he/she enjoys</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>Bowel movements outside toilet</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>Bragging, boasting</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>Can’t concentrate, can’t pay attention for long</td>
<td>0 1 2</td>
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<tr>
<td>Can’t get his/her mind off certain thoughts; obsessions (describe):</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Can’t sit still, restless, or hyperactive</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Clings to adults or too dependent</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>Complains of loneliness</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Confused or seems to be in a fog</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>Cries a lot</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Cruel to animals</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>Cruelty, bullying, or meanness to others</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Daydreams or gets lost in his/her own thoughts</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Demands a lot of attention</td>
<td>0 1 2</td>
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<tr>
<td>Destroys his/her own things</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Destroys things belonging to his/her family or others</td>
<td>0 1 2</td>
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</tr>
<tr>
<td>Disobedient at home</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Disobedient at school</td>
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<tr>
<td>Doesn’t eat well</td>
<td>0 1 2</td>
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<tr>
<td>Doesn’t get along with other kids</td>
<td>0 1 2</td>
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<tr>
<td>Doesn’t seem to feel guilty after misbehaving</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Easily jealous</td>
<td>0 1 2</td>
<td></td>
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<tr>
<td>Breaks rules at home, school, or elsewhere</td>
<td>0 1 2</td>
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<tr>
<td>Acts too young for his/her age to school</td>
<td>0 1 2</td>
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Appendix O

0 = Not True (as far as you know)  1 = Somewhat or Sometimes True  2 = Very True or Often True

58. Physical problems without known medical cause:
   a. Aches or pains (not stomach or headaches)
   b. Headaches
   c. Nausea, feels sick
   d. Problems with eyes (not if corrected by glasses) (describe): ________________
   e. Rashes or other skin problems
   f. Stomachaches
   g. Vomiting, throwing up
   h. Other (describe): ________________

59. Poor school work

60. Poorly coordinated or clumsy

61. Prefers being with older kids

62. Prefers being with younger kids

63. Refuses to talk

64. Repeats certain acts over and over; compulsions (describe): ________________

65. Runs away from home

66. Screams a lot

67. Secretive, keeps things to self

68. Sees things that aren’t there (describe): ________________

69. Self-conscious or easily embarrassed

70. Sets fires

71. Sexual problems (describe): ________________

72. Showing off or clowning

73. Too shy or timid

74. Sleeps less than most kids

75. Sleeps more than most kids during day and/or night (describe): ________________

76. Inattentive or easily distracted

77. Speech problem (describe): ________________

78. Stares blankly

79. Steals at home

81. Stores up too many things he/she doesn’t need (describe): ________________

82. Strange behavior (describe): ________________

83. Strange ideas (describe): ________________

84. Stubborn, sullen, or irritable

85. Sudden changes in mood or feelings

86. Sulks a lot

87. Suspicious

88. Swearing or obscene language

89. Talks or walks in sleep (describe): ________________

90. Talks too much

91. Teases a lot

92. Temper tantrums or hot temper

93. Thinks about sex too much

94. Threatens people

95. Thumb sucking

96. Smokes, chews, or sniffs tobacco

97. Trouble sleeping (describe): ________________

98. Truancy, skips school

99. Underactive, slow moving, or lacks energy

100. Unhappy, sad, or depressed

101. Unusually loud

102. Uses drugs for nonmedical purposes (don’t include alcohol or tobacco) (describe): ________________

103. Vandalism

104. Wets self during the day

105. Wets the bed

106. Whining

107. Wishes to be of opposite sex

108. Withdrawn, doesn’t get involved with others

109. Worries

110. Please write in any problems your child has that were not listed above:

____________________________________

____________________________________