# INAPPROPRIATE AND EXCESSIVE GUILT: MEASURE VALIDATION AND DEVELOPMENTAL FINDINGS IN THE RELATION TO DEPRESSION ACROSS DEVELOPMENT

By

Carlos Tilghman-Osborne

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Approved:

David A. Cole, PhD

Craig Smith, PhD

Bahr Weiss, PhD

Tarah Kuhn, PhD

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## CHAPTER I

#### INTRODUCTION

The DSM-IV includes inappropriate or excessive guilt as a symptom of depression. Interestingly, the measurement of this construct remains somewhat problematic. Regarding the inappropriate aspect of guilt, very few measures actually exist, and those that do are embedded in larger assessments that give relatively short shrift to the construct. For example, most diagnostic interviews (e.g., Hamilton, 1960; Poznanski, Cook, & Carroll, 1979; Puig-Antich & Chambers, 1978; Spitzer, Williams, Gibbon, & First, 1992) include very few questions (sometimes only one) about inappropriate guilt. Regarding the excessive aspect of guilt, a wide range of measures exist; however, what actually qualifies as excessive on these measures is unclear. For example, the Personal Feelings Questionaire-2 (Harder and Greenwald, 1999) assesses the extent to which an individual currently feels guilty, but without norms for this measure it is difficult to determine how high a score must be to qualify as excessive. When we turn our attention to childhood, this measurement uncertainty is even more pronounced. Childhood is a time when certain kinds of unrealistic or excessive self-blame can be normative (Leitenberg, Yost, & Carroll-Wilson, 1986). A measure of inappropriate and excessive guilt needs to be sensitive to this developmental factor. Because what constitutes inappropriate and excessive in adults may be normative in children, one might expect that the relation between depression and inappropriate and excessive guilt to be relatively weak in children but strengthen with age. The aim of this project is to create and validate a new measure of inappropriate and excessive guilt for use with children and adolescents and to explore its relation to depression across development.

Guilt researchers talk about the possibility of guilt being excessive or inappropriate (Harder, Cutler, & Rockart, 1992; Kochanska, DeVet, Goldman, Murray, & Putnam, 1994; O'Connor, Berry, & Weiss, 1999; Zahn-Waxler, Kochanska, Krupnick, & McKnew, 1990); however, these aspects of the construct lack explicit definition and measurement. Harder et al. (1992) indicated that guilt is maladaptive when it becomes chronic or pathogenic. Supporting the idea that guilt can be maladaptive, Harder and colleagues (1992, 1995) reported positive correlations between guilt and measures of depression in college-aged adults. Ferguson and colleagues (1999) posited that children can also experience inappropriate guilt and reported positive correlations between guilt and depression in 5-12 year-olds using a semi-projective measure. Neither researcher, however, explains what makes guilt inappropriate, nor do their instruments contain items that clearly operationalize the "inappropriate" aspect of the construct. Additionally, these researchers do not mention what makes guilt excessive, nor do their measures indicate how high a score constitutes excessiveness. In fact, our recent review of guilt definitions and measures found no instrument that adequately assesses the inappropriate aspect of guilt, no measure that clearly assesses the excessive aspect of guilt, let alone no measure that simultaneously assesses both (Tilghman-Osborne, Cole, & Felton, 2010). Our review also found very little theoretical discussion of what constitutes inappropriate or excessive guilt. By drawing on the vast research on guilt, depression, and negative cognitive errors, we (1) explicitly define the concept of inappropriate and excessive guilt, (2) discuss the developmental factors in the relation of depression to inappropriate and excessive guilt, and (3) introduce our own measure of inappropriate and excessive guilt.

First, as a starting point, researchers tend to agree that the broader concept of guilt inherently includes a sense of responsibility. (See Barrett, Zahn-Waxler, & Cole, 1993; Caprara,

Manzi, & Perugini, 1992; O'Connor et al., 1999; Zahn-Waxler et al., 1990). They define guilt as a combination of negative affect and the belief that one is responsible for a particular outcome. They suggest that guilt becomes *inappropriate* when it involves "preoccupations or ruminations over minor failings," with indications that people "have an exaggerated sense of responsibility for untoward events" (DSM-IV TR; Sperry, 2003, p. 350). One way in which people might experience a disproportionate guilt response is if they take a lot of responsibility for an outcome over which they had little or no control.

According to Beck (1967), the *incorrect assumption of responsibly for negative events* constitutes one of four types of cognitive errors often associated with depression. Leitenberg and colleagues also described this cognitive error. Using the Children's Negative Cognitive Error Questionnaire, they found that cognitive errors were positively correlated with depression, low self-esteem, anxiety, eating disorders, and poor coping with divorce (Leitenberg et al., 1986; see also Epkins, 1996; Mazur, Wolchik, & Sandler, 1992; Ostrander, Nay, Anderson, & Jensen, 1995; Weems, 2001). Based on this work, we define the inappropriate aspect of guilt as the negative affect and cognitions associated with the erroneous assumption of responsibility. We also define the excessive aspect of guilt as feeling disproportionately bad about a particular mishap.

Second, evidence suggests that the relation of depression to inappropriate and excessive guilt may change across development. According to Leitenberg et al. (1986), the negative cognitive errors associated with inappropriate and excessive guilt may be normative for children under 10 years of age. Their research indicates that as children's cognitive reasoning abilities mature, cognitive errors become less frequent. Furthermore they found that age and negative cognitive errors interacted to predict concurrent depression such that the relation was stronger for

older children. In terms of development, children acquire the ability to think hypothetically and take others' views into perspective around adolescence (formal operations; Hoffman, 1972; Piaget, 1964). Prior to adolescence, children tend to view the world in more concrete and less abstract ways. For example, studies have shown that children younger than 10 may perceive a single event as a cause of a single outcome; e.g., "I scribbled on the wall" is a sufficient cause for "Daddy left." Once formal operational thought develops, children can extend their sense of formal logic and understand more complicated causal connections, thereby perceiving, "I scribbled on the wall, and daddy and mommy argued which they do a lot. Their arguing is why daddy left" (Grave & Blissett, 2004). This developmental shift happens at round age 10, about the same age as Leitenberg et al. found age-related decreases in negative cognitive error scores, suggesting cognitive errors are less common in older children (1986). As cognitive errors decrease and as children develop such cognitive abilities as abstract reasoning, higher capacity to retain information, and perspective-taking, we hypothesize that inappropriate and excessive guilt will also become less normative with age. That is, adolescents will experience less inappropriate and excessive guilt than will children. Furthermore, we hypothesize that the relation of depression to inappropriate and excessive guilt will strengthen with age. We also intend to replicate Leitenberg et al.'s finding that the relation of depression to negative cognitive errors strengthens with age.

Third, we introduce a new instrument for use with children and adolescents. In this effort we address five major issues. First, is to avoid the accidental confounding of guilt with other closely related constructs such as depression. Our review of guilt measures (Tilghman-Osborne et al., 2010) found that many existing measures contain contaminated items that may confound results by inadvertently inflating correlations between guilt and outcome constructs. These

confounds may be responsible for the mixed findings among studies linking guilt to depression and other forms of psychopathology across development. Whereas some researchers find guilt to be an adaptive construct related to positive outcomes (Tangney et al., 1992), others have found that guilt is a maladaptive construct associated with negative outcomes (Harder and Zalma, 1999). One goal is to design a measures that assesses guilt per se, and not variables with which it is highly correlated.

Second, is to avoid the presumption that children inherently know what is excessive or inappropriate when it comes to guilt. Simply asking "Do you feel guilty when you should not?" presupposes that the respondent has sufficient perspective to distinguish appropriate from inappropriate guilt (a dubious assumption if one is truly experiencing inappropriate guilt). This type of question will successfully assess guilt only in those who are aware that their guilt is inappropriate. Truly inappropriate guilt may feel very real and justified to a child who has not yet reached a certain level of cognitive development. Assessing the excessive nature of guilt poses a similar challenge. Children's ability to determine the excessiveness of their guilt experiences may depend on insight and cognitive abilities not yet developed. In creating our measure, we did not want to rely heavily on a respondent's ability to recognize the inappropriateness or excessiveness of their guilt experiences. The job of determining the inappropriate and excessive nature of guilt should fall on the researcher, not the respondent.

Third, is to respect the contextual nature of guilt and yet assess a construct that generalizable across situations. According to Tangney (1996) one can distinguish between the within-situation intensity and across-situation generalizability of guilt by using scenario-based measures. She suggests that that each question about guilt should be embedded in a situational context; however, the overall assessment should aggregate responses from multiple questions

spanning a diversity of such situations. Therefore in the construction of our new measure we used a wide range of scenarios in the assessments of each individual's generalized level of guilt.

Fourth is to avoid the social desirability response bias. Robinson, Shaver, and Wrightsman (1991) discuss the need to evaluate instruments to counteract respondents desire to "appear good." Social desirability can introduce systematic errors into instruments that can affect the true score of the construct. They highlight that when constructing a new instrument one must evaluate the correlation between the new measure and existing measures of social desirability. We intend to evaluate our measure to ensure that it is not systematically contaminated by a tendency to respond in socially desirable ways.

Fifth, is to design a measure that is appropriate for use with children as well as adolescents. In children, little research has examined the maladaptive side of guilt. Instead, most research with children focuses on the adaptive nature of guilt, exploring linkages between guilt and empathy, socialization, parenting, or the development of morality (Cornell & Frick, 2007; Ferguson & Stegge, 1995; Kochanska et al., 1994; Williams & Bybee, 1994). In the current study, we attempt to fill this gap by focusing on inappropriate and excessive guilt in children and adolescents. Toward this end, we created a new measure.

Our new measure, called the Inappropriate and Excessive Guilt Scale (IEGS), was created with input from both clinicians and researchers whose work involved the assessment of depression and guilt. We designed the measure for use with children ages 7 to 18 with items assessing both the inappropriate and excessive aspects of guilt. We used the IEGS to explore 8 goals. First, we examined the factor structure of the instrument to ascertain whether inappropriate and excessive guilt constitute one factor or two. Second, we hypothesized that the IEGS would correlate positively with other measures of guilt, negative cognitive errors, and

depression. Third, we hypothesized that the IEGS would correlate more highly with maladaptive guilt than it would with adaptive guilt. Fourth, we expected that the IEGS would account for unique variance in depressive symptoms over-and-above measures of guilt and negative cognitive errors. Fifth, we hypothesized that inappropriate and excessive guilt would be more normative for younger children than adolescents; i.e., IEGS scores will correlate negatively with age. Sixth, we hypothesized that depression would be more strongly related to inappropriate and excessive guilt in adolescents than in younger children. Seventh, we aim to replicate Leitenberg et al.'s 1986 findings and we hypothesized that depression would be more strongly related to negative cognitive errors in adolescents than younger children. Eighth, we expected that the IEGS would not be related to social desirability.

#### CHAPTER II

#### INSTRUMENT CREATION

Our goal was to create a measure that assesses the inappropriate and excessive aspects of guilt using multiple questions, encompassing a variety of scenarios. Our assessment approach aggregates across a variety of hypothetical, specific situations that may elicit inappropriate and excessive aspects of guilt. In the creation of this instrument a goal was to focus explicitly on the guilt experience and to avoid contamination from social desirability, and other constructs such as depression, anxiety, and somatization. This assessment procedure follows suggestions by Tangney and others (Tangney, 1996; Tilghman-Osborne et al., 2010). Instrument development consisted of two stages.

#### Item Generation

Hypothetical scenarios and inappropriate and excessive guilt statements were solicited from clinical psychologists and doctoral candidates in clinical psychology other depression assessment experts. The experts were asked to provide thoughts and scenarios reflective of inappropriate and excessive guilt that they had heard from clients and subjects. They were also asked which questions or scenarios they use when trying to assess inappropriate and excessive guilt in children. This process generated over fifty statements. A team of doctoral candidates in clinical psychology selected 24 hypothetical scenarios that reflected a broad range of situations. For each scenario they constructed a pair of statements; one reflected inappropriate guilt and the

other reflected excessive guilt. Each statement was paired with a 3-point Likert scale (0 = Not at All, 1 = A Little, 2 = A Lot)

## Piloting the Measure

We piloted the full measure with 25 children between 7 and 10 years of age seeking treatment in an outpatient mental health faculty. Children were asked read each scenario and corresponding statements of guilt and rate each statement on the 3-point scale. Then the principal investigator reviewed each scenario with the child asking several questions to ascertain their understanding of the words and the meaning of the scenario. We used the children's feedback about the clarity of items as well their response frequencies of each item to identify potentially problematic items. We then altered the wording of items for greater clarity and plausibility. The final instrument, named the Inappropriate and Excessive Guilt Scale (IEGS), is discussed below.

The IEGS consists of 24 scenarios with negative outcomes and ambiguous fault. An example scenario is, "You are late getting home. Your little brother falls and hurts himself." Each scenario is followed by two responses (one that assesses inappropriateness and one that assesses excessiveness). Subjects think about how they have been feeling over the last week and rate two responses. For example, "Would you think: "I was late and he got hurt. It is my fault." (Inappropriateness), and "Just thinking about what I did would make me want to cry." (Excessiveness). Scores are aggregated to calculate a total inappropriate and excessive guilt score, and each subscale (Inappropriateness and Excessiveness) can be scored separately to create two corresponding subscale scores. For the complete measure see Appendix C.

## **CHAPTER III**

# INSTRUMENT VALIDATION

# **Participants**

A total of 370 children and adolescents participated in this study. Participants attended either an elementary school, middle school, or a high school just outside a midsize southeastern city. To recruit students, we distributed 960 informed consent forms and letters to students to bring home to their parents. Of the 960 students contacted, 416 (43%) obtained permission from parents to participate. Of these 416 students, 370 (89%) were present on the day of the testing and gave their assent to participate. Overall, the sample slightly overrepresented girls (58% females vs. 42% males) and was drawn from schools that were primarily white (94% White, 3% Hispanic, 2% African-American, 1% Other). The participants ranged in age from 7 years to 15 years (*M*=10.3, *SD*=2.0).

## Measures

In addition to the IEGS we administered five other instruments. These measures included two measures of guilt, one measure of negative cognitive errors, one measure of depression, and one measure of social desirability.

The first guilt measure is the Test of Self-Conscious Affect for Children (TOSCA-C; Tangney, Wagner, Gramzow, & Fletcher, 1990) is a self-report measure comprised of 15 scenarios (10 negative and 5 positive) designed for use with children aged 8-12 years. Each scenario is paired with an illustration and followed by four or five responses that assess guilt, shame, externalization, detachment, alpha pride, and beta pride. For this study, only the guilt

responses were used in analyses. For an example scenario, "You trip in the cafeteria and spill your friends drink" the guilt-proneness response is, "I would feel sorry, very sorry. I should have watched where I was going." Responses are rated on 5-point Likert scales (1 = not at all likely to 5 = very likely). The guilt scale of the measure has moderate levels of internal consistency, test-retest reliability, convergent and discriminant validity, and predictive validity (Robins, Noftle, & Tracy, 2007; Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). The TOSCA-C correlates negatively or negligibly with measures of depressive symptoms (Tangney et al., 1996). In our study, the α reliability for the guilt scale was .90.

The second guilt measure is the Shame and Guilt Scale (SGS; Alexander, Brewin, Vearnals, Wolff, & Leff, 1999) is a list of ten scenarios that assess guilt (5 items) and shame (5 items). Only the guilt responses were in analyses for this study. Example guilt items are "Secretly cheating on something you know will not be found out," and "To behave unkindly." Respondents are prompted to "indicate the degree of upset you would experience in each situation." Responses are rated on a 5-point Likert scale. The measure has demonstrated high levels of internal consistency, convergent and discriminant validity, and predictive validity with a clean 2-factor solution. The SGS correlates positively with depression symptom measures (Alexander et al., 1999). In our study, the α reliability for the guilt scale was .79.

The negative cognitive error instrument is the Children's Negative Cognitive Error Questionnaire (CNCEQ; Leitenberg et al., 1986). The CNCEQ contains 24 hypothetical situations and statements that assess over-generalized predictions of negative outcomes (6 items), catastrophizing (6 items), incorrectly taking personal responsibility (6 items), and selectively attending to negative features of outcomes (6 items). An example scenario is, "Your cousin calls you to ask if you would like to go on a long bike ride. You think, 'I probably won't be able to

keep up and people will laugh at you'" (catastrophizing). For this study, responses were aggregated and the total CNCEQ scale was used for final analyses. The CNCEQ has demonstrated high levels of internal consistency, test-retest reliability, and construct validity (Leitenberg et al., 1986; Weems et al., 2001). Leitenberg (1986) also published normative data for some age groups. In our study the α reliability was .94.

The social desirability measure is the Children's Social Desirability scale- Short Form (CDS- Short Form; Tilgner, L., Wertheim, E. H., & Paxton, S. J. 2004). The CDS contains 24 true-false items. Items are worded such that each item is true for almost every child or almost no child. An example item is, "Sometimes I wish I could just mess around instead of having to go to school." (true item). If a child answers in the minority (false on the example item), it is an indication of social desirability in response patterns. The measure has demonstrated good test-retest reliability, high levels of internal consistency, and strong evidence of convergent validity (Tilgner et al., 2004). In our study the α reliability was .82.

To measure depression, we used is the Children's Depression Inventory (CDI). The CDI (Kovacs, 1981) was a 27-item self-report measure that assesses cognitive, affective, and behavioral symptoms of depression in children. Each item consists of three statements graded in order of increasing severity from 0 to 2. Children select one sentence from each group that best describes themselves for the past two weeks. In nonclinic populations, the measure has relatively high levels of internal consistency, test-retest reliability, predictive, convergent, and construct validity (Blumberg & Izard, 1986; Carey, Faulstich, Gresham, Ruggiero, & Enyart, 1987; Kazdin, French, & Unis, 1983; Lobovits & Handal, 1985; Mattison, Handford, Kales, Goodman, & McLaughlin, 1990; Saylor, Finch, Spririto, & Bennett, 1984; Smucker, Craighead, Craighead, & Green, 1986; Worchel, Hughes, Hall, & Stanton, 1990). For our study we did not include the

suicide item per the school's request. The  $\alpha$  reliability without the suicide item was .89. To see full versions of all measures from this study, see Appendix D.

# Procedures

Participating students completed a packet of questionnaires. Doctoral psychology students, advanced undergraduate students, and research assistants administered the questionnaires to the students. For 2<sup>nd</sup> grade students, the research assistants read all questionnaires aloud in groups of 6-8, requiring all to proceed at the same pace, irrespective of their reading abilities. For the 3<sup>rd</sup>-5<sup>th</sup> grade students, the questionnaires were read aloud in groups of 25-60. For the 6<sup>th</sup>-9<sup>th</sup> graders, the IEGS was read aloud to students in groups of 80-100 and then students proceeded at their own pace. The sequence in which the questionnaires were administered was randomized by grade in order to minimize the effects of order and fatigue on any instrument. Two to three additional research assistants circulated among the participants answering questions as needed.

## **CHAPTER IV**

## **RESULTS**

# **Preliminary Results**

Table 1 contains descriptive statistics for the TOSCA-C, SGS, CNCEQ, CDI, and CSD. These descriptive statistics for the subscales of each measure were comparable to those obtained in other studies with similar populations (e.g., Alexander et al., Leitenberg et al., 1986; Tangney et al., 1990; Tilgner et al., 2004).

# Goal 1: Factor Analysis of the IEGS

We ran an exploratory principal axis factor analysis with oblique rotation for the IEGS. The scree plot suggested one factor (See Figure 1). Furthermore, the 2, 3, and 4- factor solutions were not interpretable (with the first factor containing most of the items). Taken together, these results indicated that a 1-factor solution best fit the data suggesting that inappropriate and excessive guilt can be treated as one construct. Factor loadings appear in Table 2. Only the two items associated with scenario 1 had a factor loading less than .30 and were thus dropped. The 46 remaining items were used in the calculation of a total inappropriate and excessive guilt score. The α reliability for the scale was .94.

#### Goal 2: Positive relation to other measures

We hypothesized that the IEGS would correlate positively with other measures of guilt, negative cognitive errors, and depression. As expected, we found positive correlations between

the IEGS and the TOSCA-C, SGS, CNCEQ, and CDI. Table 3 shows that the correlations ranged from .39 to .54.

Goal 3: The IEGS will be more associated with maladaptive guilt than adaptive guilt

We did not find support for the hypothesis that the IEGS would correlate more highly with the SGS (our measure of maladaptive guilt) than with the TOSCA-C (our measure of adaptive guilt). The correlation between the IEGS and SGS (r = .43) was not significantly different than the correlation between the IEGS and the TOSCA-C (r = .52) as the Fisher's z ratio = 1.63 was not significant.

# Goal 4: Incremental prediction of depressive symptoms

As a preliminary step we compared zero-order correlations using Fischer's z ratios. We found that the CDI correlated more strongly with the IEGS than it did with the TOSCA-C (z = 3.42, p < .01), the SGS (z = 8.20, p < .01), but not the CNCEQ (z = 0.71, NS). Then we conducted multiple regression analyses to look at the incremental utility of the IEGS. First, we regressed depressive symptoms (CDI) onto the SGS, TOSCA-C, and IEGS and found a significant and positive regression coefficient for the IEGS ( $\beta = .46, p < .01$ ; see table 4). Then we added the CNCEQ to the regression and found that the beta for the IEGS remained positive and significant ( $\beta = .23, p < .01$ , see Table 5).

Taken together, these results indicate that IEGS accounted for variance in the CDI over-andabove other measures of guilt and negative cognitive errors. Goal 5: Inappropriate and excessive guilt will be more normative for younger children

We found support for the age-related hypotheses that IEGS scores would be lower for older children. The correlation between age and IEGS was negative (r = -.28, p < .01). In Figure 2 we see that the mean IEGS scores diminish with age.

# Goal 6: Interaction between age and IEGS

We hypothesized that the IEGS would interact with age to predict CDI scores such that the IEGS and the CDI would correlate more strongly for older children than younger children. We conducted a multiple regression analysis with depression (CDI) as the dependent variable, and AGE (in years), IEGS, and the interaction of AGE and IEGS (AGE x IEGS) as the independent variables: CDI =  $\beta_0 + \beta_1$ AGE +  $\beta_2$ IEGS +  $\beta_3$ AGE x IEGS. We found that when controlling for the main effects of AGE and IEGS ( $\beta_1$  and  $\beta_2$ ) the interaction effect ( $\beta_3$ ) was significant and positive ( $\beta$  = .58, p<.05; see Table 6). When plotted, the slope for the relation between the IEGS and the CDI was positive and greater for older children than for younger children (see Figure 3).

# Goal 7: Interaction between age and negative cognitive errors

We hypothesized that the relation between depression and negative cognitive errors would be stronger for adolescents than younger children. We conducted a multiple regression analysis with CDI as the dependent variable, and AGE, CNCEQ, and the interaction of AGE and CNCEQ (AGE x CNCEQ) as the independent variables. The interaction between the CNCEQ and AGE was significant ( $\beta = .61$ , p < .01, see Table 7). The plot was similar to that of the IEGS

and revealed that the CNCEQ is more associated with depressive symptoms for older children than younger children (see Figure 4).

Goal 8: IEGS is not correlated with social desirability

We hypothesized that the IEGS would not be contaminated by a positive response bias. Toward this end, we found that the correlation between CSD and the IEGS was small (r = -.05) and not statistically significant. As a matter of comparison, the SGS and CNCEQ had significant correlations with the CSD (see Table 3).

#### CHAPTER V

#### DISCUSSION

In this section, we discuss our findings as well as future avenues of research. Our results support four major findings. First, we found significant evidence supporting that inappropriate and excessive aspects of guilt constitute one factor. Second, we found evidence of convergent, discriminant, and construct validity of the IEGS. Third we found support that the IEGS correlated with depressive symptoms over-and-above two pre-existing, commonly used measures of guilt and a measure of negative cognitive errors. This finding supports the incremental validity of the IEGS relative to depression. Fourth, we found significant support for our developmental hypotheses that inappropriate and excessive guilt and negative cognitive errors are more normative for younger children and more highly correlated with depressive symptoms for older children. We elaborate on each of these findings below and discuss clinical implications.

First, factor analysis revealed that items aimed at separately assessing inappropriate or excessive aspects of guilt loaded onto a single factor. The discovery of a single underlying factor may suggest that inappropriate and excessive guilt constitute two aspects of the same underlying construct. In other words one may not be able to experience inappropriate guilt without also experiencing excessive guilt and vice versa. This finding has three potential implications for practice and research. One pertains to diagnosis. For diagnosing depression, the DSM-IV TR states that one of the symptoms of depression is *either* feelings of worthlessness *or* excessive or inappropriate guilt (Sperry, 2003). Supporting the DSM view of the symptom, our findings

support the notion that inappropriate and excessive aspects of guilt may not need to be measured separately. Another clinical implication pertains to treatment. In treating depression, clinicians who use cognitive strategies such as Cognitive Behavioral Therapy identify and reduce maladaptive thoughts and cognitive errors. By helping reduce these inappropriate thought patterns, clinicians may also reduce the overall amount of guilt. Finally, the researchers who examine the negative and maladaptive form of guilt generally do not distinguish between the inappropriate and excessive aspects (see Harder, Cutler, & Rockart, 1992; Kochanska, DeVet, Goldman, Murray, & Putnam, 1994; O'Connor, Berry, & Weiss, 1999; Zahn-Waxler, Kochanska, Krupnick, & McKnew, 1990). Our results support this research approach. One may need not distinguish between aspects of guilt and one factor may be used when researching the relation of depressive guilt to other constructs of interest.

Second, we found evidence for the convergent, discriminant, and construct validity of the IEGS. Supporting convergent validity, the IEGS significantly correlated with other measures of guilt. Supporting discriminant validity, the IEGS was not related to a measure of social desirability. Supporting construct validity, the IEGS was significantly related to measures of negative cognitive errors and depression. Many researchers have suggested that guilt can be either adaptive (motivating positive outcomes) or maladaptive (motivating negative outcomes, Alexander et al., 1999; Harder, 1995; Kugler & Jones, 1992; O'Connor et al., 1999; Williams & Bybee, 1994). For example Harder and Greenwald (1999) suggest that transient feelings of "guilt facilitate adaptive self-control, prosocial behaviors, and the repair of ruptures in relationships," and that when guilt becomes a chronic experience it can be maladaptive (p. 271). Zahn-Waxler et al. (1990) claim "different patterns of adaptive and maladaptive guilt already appeared to be present by the end of preschool years" (p. 57). Existing measures of guilt tend

focus more on the adaptive form of guilt than the maladaptive (e.g., several versions of the TOSCA, Tangney, Dearing, Wagner, & Gramzow, 2000; Tangney, Wagner, Gavlas, & Gramzow, 1991; Tangney et al., 1990). For clinicians interested the assessment of truly depressive or maladaptive guilt, our IEGS warrants merit.

Third, the IEGS demonstrated incremental utility in relation to depression. The IEGS correlated with depressive symptoms over-and-above two measures of guilt and a measure of negative cognitive errors. Because inappropriate and excessive guilt also correlate highly with negative cognitive errors, includes both cognitive errors of responsibility and negative affect, and is associated with depressive symptoms, we would expect it to be associated with other forms of psychopathology as well. The IEGS seems to capture maladaptive and depressive guilt in ways that other measures do not. The IEGS may also be related to other types of psychopathology. Supporting this idea, negative cognitive errors have been found to correlate with anxiety, eating disorders, and poor coping (Epkins, 1996; Leitenberg et al., 1986; Mazur et al., 1992; Ostrander et al., 1995; Weems, 2001). Future studies could examine the relation between inappropriate and excessive guilt and anxiety, eating disorders, and poor coping.

Fourth, our developmental findings showed that both inappropriate/excessive guilt and negative cognitive errors are more common for younger children and more harmful for older children. Our findings with negative cognitive errors reflected previous studies (see, Grave & Blissett, 2004; Leitenberg et al., 1986), which found that mean levels of negative cognitive errors were higher for younger children than older children. These studies also showed that the relation of negative cognitive errors to depression was stronger for older children. Our findings with inappropriate and excessive guilt mirrored these results. Not only were mean levels of inappropriate and excessive guilt higher among younger children than older, but the relation of

inappropriate and excessive guilt to depressive symptoms was stronger for older children than younger. Our results suggest that inappropriate and excessive guilt in younger children may reflect typical development as well as depression. Conversely, when inappropriate and excessive guilt occurs in older children or adolescents, it may be more reflective of depression.

Taken together, these developmental results have implications for the assessment and treatment of psychopathology. When assessing depression, researchers and clinicians should be aware that a young child's endorsement of inappropriate and excessive guilt may be indicative of underlying depression, a typical aspect of developmental, or both. Our findings expand on Grych and Fincham findings (1990) that older children are more vulnerable to the development of maladaptive cognitive processes when exposed to adversities such as marital conflict than are younger children. When using depression instruments and interviews, researchers should be aware that questions about inappropriate and excessive guilt may be endorsed more often by younger children than by older children and adolescents. Caution should be taken because the higher levels of the symptom in younger children may not be as strong an indicator depression.

Such developmental findings also have implications for the treatment of depression and anxiety. Although younger children may endorse cognitions associated with inappropriate and excessive guilt more frequently than older children, this kind of thinking should not be ignored in treatment. Our results showed that the relation between depression and inappropriate/excessive guilt was stronger for older children; however, it was still significant for younger children. Even in younger children, this kind of thinking was associated with depression. Cognitive Behavioral Therapy (CBT) is one appropriate method for treating cognitive errors associated with depression and anxiety in children and adolescents (Harrington, Wood, & Verduyn, 1998; Kendall, 1994); however, Graves and Blissett (2004) outlined developmental factors that should

be taken into account when applying CBT to children. They suggest that a goal of CBT is to identify possible cognitive distortions, challenge them, and then replace them with more rational thinking. To do this, they argue, requires "self-reflection, perspective taking, understanding casualty, reasoning and processing new information, as well as linguistic ability and memory" (p. 402). These developmental factors are of vital importance for the implementation of CBT with children. The authors also argue that children who have not attained formal operational thought may not have reached a level of development sufficient to handle the cognitive demands required of CBT. Future research could focus on the development of methods for addressing depressive guilt in young children who may not have the capacity to engage in tasks required in typical CBT.

Finally, several shortcomings of our project suggest possibilities for future research.

First, the IEGS did not correlate more highly with the SGS (a measure of maladaptive guilt), than it did with the TOSCA-C (a measure of adaptive guilt). This result may reflect the possibility that the SGS does not actually tap a very maladaptive form of guilt. One possible issue with the SGS is that the items themselves focus on how upset one might feel in relatively common guilt-inducing situations (e.g. "You behave unkindly," "You hurt someone's feelings.") High scores on the instrument may not necessarily reflect inappropriate guilt feelings. Another possible issue is that although Alexander et al. (1999) found a positive correlation between the SGS and measures of depression, their work focused on a relatively depressed clinical sample. In a depressed clinical sample, the predominant form of guilt may be maladaptive or depressive. In our non-clinical sample, the SGS did not correlate with depression (see Table 3). Furthermore, the SGS correlated positively with the TOSCA-C (a measure of adaptive guilt). Thus, in a more heterogeneous sample, the SGS may be particularly sensitive to a more adaptive or reparative

form of guilt. Additionally, the SGS correlated positively with the social desirability, indicating that its items may be subject to positive response bias. Correcting these measurement-related problems, our study introduces the first measure of clearly inappropriate and excessive guilt. Future research is needed to develop more measures of inappropriate and excessive guilt so as to assess the convergent validity of the IEGS.

Second, we validated our instrument of inappropriate and excessive guilt using other paper and pencil measures of guilt, depression, and negative cognitive errors. Future research could validate the measure against qualitatively different methods such as semi-structured interviews or even behavioral observation methods (e.g., Clown Doll Paradigm, Barrett et al., 1993; Doll Paradigm, Kochanska et al., 1994). Such a multi-method approach could provide stronger evidence of convergent validity.

Third, our findings were based on cross-sectional correlations and regression analyses.

Longitudinal studies could explore the predictive relations between depressive symptoms and inappropriate and excessive guilt. Cole et al. (1998) found some weak support that negative cognitive errors predicted depression in a longitudinal study. Converging upon inappropriate and excessive guilt with multiple measures could yield stronger longitudinal results.

Fourth, our sample was primarily non-clinical. Future studies could validate our findings with a clinical sample with higher levels of depression and other forms of psychopathology. In order to understand the relation to depression per se, a sample should include truly depressed individuals. Furthermore, our developmental findings may be limited to non-clinical samples. Perhaps, among children with more severe depression, age does not factor in to the manifestation of inappropriate and excessive guilt symptoms. Finally, we used age as a proxy for other cognitive abilities. Future studies could measure directly cognitive levels of development.

In conclusion, this study introduced the first instrument that clearly and explicitly measures inappropriate and excessive guilt in children and adolescents. We found significant evidence supporting the validity of the IEGS and strong support for the relation of depression to inappropriate and excessive guilt across development.

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### APPENDIX A

### **TABLES**

Table 1. Means, SDs, and Reliabilities

	Mean	SD	α
AGE	10.28	2.03	
TOSCA-C Guilt	49.69	13.63	.90
CDI	8.31	7.66	.89
SGS Guilt	17.37	5.29	.79
CSD	29.09	4.58	.82
CNCEQ Total	48.55	19.19	.94

TOSCA-C Guilt = Test of Self-Conscious Affect- Child version- Guilt Scale, SGS = Shame and Guilt Scale- Guilt Subscale, IEGS = Inappropriate and Excessive Guilt Scale, CNCEQ = Children's Negative Cognitive Error Questionnaire, CDI = Children's Depression Inventory, CSD = Children's Social Desirability scale- Short Form.

Table 2. Factor loadings of the IEGS

Table 2. Factor loadings of the IEGS	
Item	Factor
	Loading
1. You overhear your parents arguing, but cannot make out any of the words they are saying.	25
In: How much would you think: "It is probably my fault that my parents are arguing."	.27
Ex: Would you feel sick to your stomach because it is your fault?	.25
2. One day when you are not at school, your group of friends gets into trouble.	
Ex: How much would you think: "I usually do the same things that got them into trouble. This is my fault too."	.32
In: Would you feel bad because you should have gotten into trouble with them?	.35
3. Your class plays a trivia game and your team loses.	
In: Would you think: "I did not get all my questions right, this whole thing is my fault."	.40
Ex: I would not be able to stop thinking about how it is my fault.	.44
4. You and a partner work on a project. You work hard, but your partner goofs off. Your project gets a bad grade.	
In: Would you think: "I didn't work hard enough. The bad grade is partly my fault.	.30
Ex: I would feel guilty for a long time afterwards.	.44
5. There is a lot of traffic on the road, and you end up late for school.	• • • • • • • • • • • • • • • • • • • •
In: Would you think: It is partly my fault. I was late to school."	.40
Ex: It would almost hurt to think about what I did.	.50
6. You are late getting home. Your little brother falls and hurts himself.	
In: Would you think: "I was late and he got hurt. It is my fault."	.47
Ex: Just thinking about what I did would make me want to cry.	.50
7. You guess the number your teacher was thinking of and get the last chocolate milk.	
In: Would you think: "Other people did not get chocolate milk and it is partly my fault."	.46
Ex: This would bother me the rest of the week.	.56
8. You are playing a board game and get a card that says, "send one player back to the beginning	
of the game."	
In: Would you think: "Other people did not get chocolate milk and it is partly my fault."	.45
Ex: This would bother me the rest of the week.	.45
9. Your friend gets into a lot of trouble at school for talking during class.	
In: Would you think: "It is my fault because I was not there to help him."	.38
Ex: I would feel really bad for what I failed to do.	.54
10. You get sick, so your family cannot go to the movies.	
In: Would you think: "This is all my fault."	.35
Ex: I would feel so guilty I would have trouble thinking straight.	.49
11. While walking down the hallway, you see your teacher talking to the principal and looking at	,
you.	
In: Would you think: "I must have done something wrong."	.37
Ex: I would feel too guilty to look back.	.43
12. You decide to sit in a different seat for class. Someone sitting in your old seat gets hurt when	
the chair leg breaks.  In: Would you think: "Why did I switch seats? She got hurt because of me."	.63
,	
Ex: It would be hard for me to stop thinking about what I did.	.63
13. You left your homework on the kitchen table and your parents throw it out.	22
In: Would you think: "It is my fault."	.32

Ex: I would have trouble sleeping just thinking about it.	.41
	Factor
Item	Loading
14. You and a friend are skipping rocks on a pond. Your friend throws his rock at a tree. His rock	
hits a bird.	4.5
In: Would you think: "The bird got hurt because of me."	.45
Ex: I would feel so guilty I wouldn't want to skip rocks again.	.46
15. You go trick-or-treating for Halloween. You pick a candy that ends up tasting bad.	2.0
In: Would you think: "It is my fault. I picked a bad candy."	.30
Ex: In my head, I would keep thinking about it.	.37
16. Your grandparents are away on vacation and forget to send you a birthday card.	
In: Would you think: "I did something wrong."	.53
Ex: I would keep thinking of all the bad things I did that might have caused it.	.63
17. You are mad a teacher and don't want to take her test. You think, "I hope she gets sick" and the next day she does get sick.	
In: Would you think: "It is my fault she got sick."	.53
Ex: My heart would feel bad because of what I did.	.62
18. You and your friends are playing basketball and your friends get into a fight.	
In: Would you think: "It's my fault they got in a fight."	.38
Ex: I would feel too guilty to look at my friends.	.46
19. Your friend gets a flat tire on his bike. He is carrying your present to your birthday party.	
In: Would you think: "It is my fault his tire is flat."	.46
Ex: My head would almost hurt thinking about how his tire is flat because of my party.	.54
20. Your mother says she wants a certain book for her birthday. You get her that book, but she	
does not like it.	
In: Would you think: "It is my fault, I ruined her birthday."	.51
Ex: I would feel bad every time I saw the book.	.61
21. You and a friend go for a swim, and your friend gets sick.	
In: Would you think: "It was my fault he got sick."	.54
Ex: I would be disgusted with myself.	.62
22. You go to a movie with a friend. Your friend got in trouble for not doing her homework.	
In: Would you think: "I am to blame for her getting into trouble."	.47
Ex: I would feel so guilty I wouldn't be able to look at myself.	.55
23. Your mother made your lunch. It leaked all over your homework in your book bag.	
In: Would you think: "It's my fault that my homework got ruined."	.38
Ex: I would think: "I'll never pack my own bag again."	.39
24. A game gets stolen from your locker.	
In: Would you think: "My parents should be mad at me."	.47
Ex: I would feel really guilty.	.58

In = Inappropriate guilt response, Ex = Excessive guilt response.

Table 3. Correlations between guilt, depression, CSD, and negative cognitive error measures.

		8		_ ,		
Instrument	1	2	3	4	5	6
1. IEGS	1					
2. TOSCA-C	.52**	1				
3. SGS	.43**	.62**	1			
4. CNCEQ	.54**	.38**	.24**	1		
5. CDI	.39*	.12*	.05	.52**	1	
6. CSD	05	.03	.12*	.27**	28**	1

TOSCA-C = Test of Self-Conscious Affect- Child version, SGS = Shame and Guilt Scale, IEGS = Inappropriate and Excessive Guilt Scale, CNCEQ = Children's Negative Cognitive Error Questionnaire, CDI = Children's Depression Inventory, CSD = Children's Social Desirability scale.

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

Table 4. Regression of Depression onto TOSCA-Guilt, SGS Guilt, and IEGS

Predictor	В	SE (B)	Beta	$R^2$
TOSCA Guilt	02	.04	04	
SGS Guilt	19	.09	13*	
IEGS	.23	.03	.46**	.17

TOSCA-C = Test of Self-Conscious Affect- Child version, SGS = Shame and Guilt Scale, IEGS = Inappropriate and Excessive Guilt Scale \*=p<.05, \*\*=p<.01

Table 5. Regression of Depression onto TOSCA-Guilt, SGS Guilt, CNCEQ, and IEGS

Predictor	В	SE (B)	Beta	$R^2$
TOSCA Guilt	07	.03	13*	
SGS Guilt	13	.08	09	
CNCEQ	.18	.02	.46**	
IEGS	.12	.03	.24**	.31

TOSCA-C = Test of Self-Conscious Affect- Child version, SGS = Shame and Guilt Scale, IEGS = Inappropriate and Excessive Guilt Scale, CNCEQ = Children's Negative Cognitive Error Questionnaire \*=p<.05, \*\*=p<.01

Table 6. Regression of Depression onto IEGS, AGE, and IEGSxAGE interaction.

Predictor	В	SE (B)	Beta	$R^2$
AGE	29	.33	08	
IEGS	09	.15	18	
IEGSxAGE	.03	.02	.58*	.17

AGE = age, IEGS = Inappropriate and Excessive Guilt Scale \*=p<.05, \*\*=p<.01

Table 7. Regression of Depression onto CNCEQ, AGE, and CNCEQxAGE interaction.

Predictor	В	SE (B)	Beta	$R^2$
AGE	-1.32	.50	35**	
CNCEQ	.01	.09	.01	
CNCEQxAGE	.02	.01	.61*	.28

AGE = age, CNCEQ = Children's Negative Cognitive Error Questionnaire \* = p < .05, \*\* = p < .01

## APPENDIX B

## **FIGURES**

Figure 1. Scree plot for the factor analyses of the IEGS

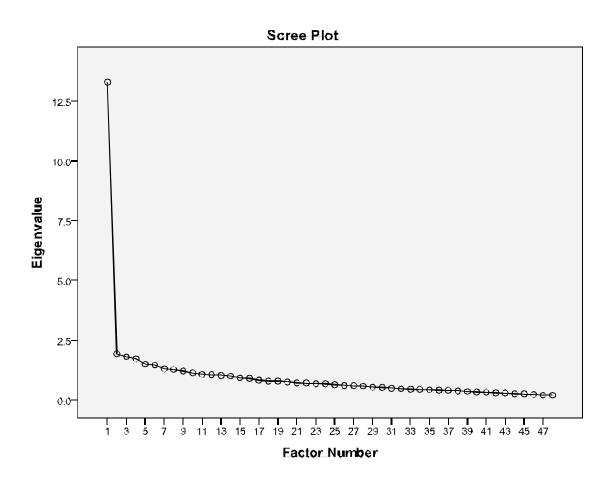
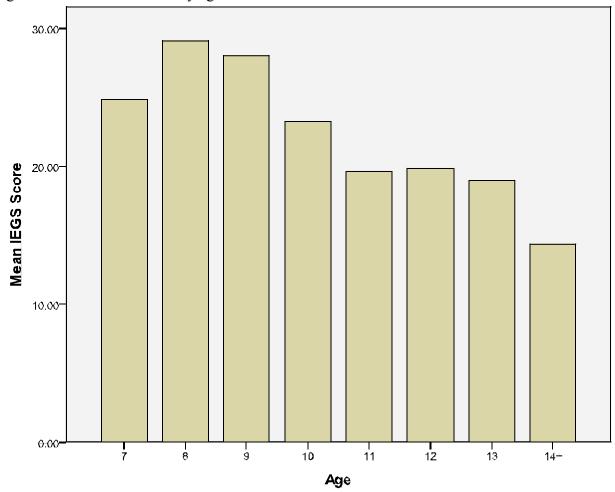
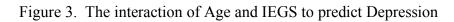
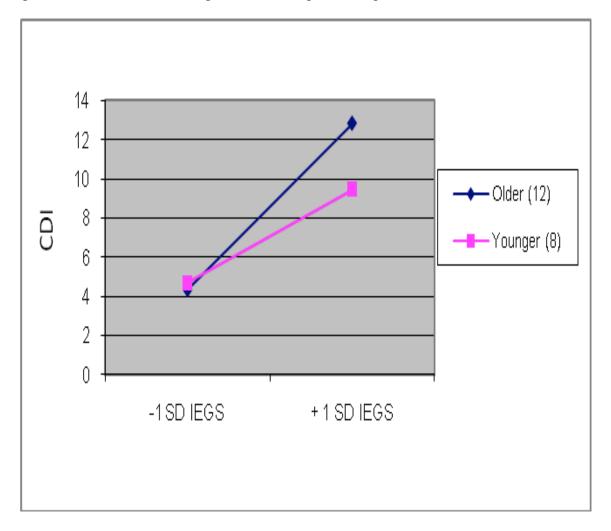
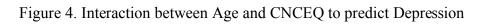


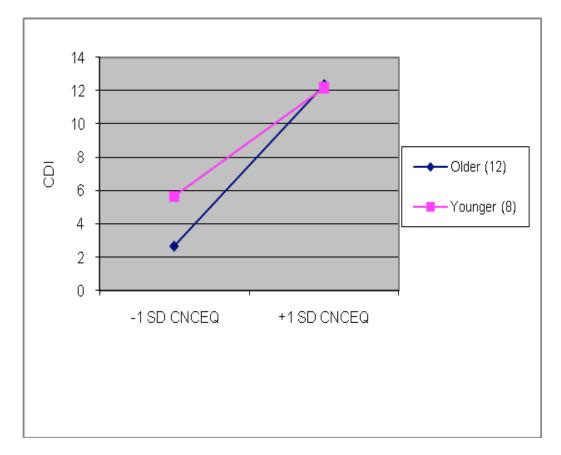
Figure 2. Mean IEGS scores by age.











### APPENDIX C

### Inappropriate and Excessive Guilt Scale (IEGS)

## Imagine That...

Read these situations carefully and think about how you have been feeling for the last 2 weeks. Imagine that each of these things happened to you. Then mark how you would think or feel if these things did happen to you. There are no right or wrong answers. Just be as honest as possible.

Imagine that	Not at all	A Little	A Lot
1. You overhear your parents arguing, but cannot make out any of the words they are sayi			
How much would you think: "It is probably my fault that my parents are arguing."	0	1	2
Would you feel sick to your stomach because it is your fault?	0	1	2
2. One day when you are not at school, your group of friends gets into trouble.			
• How much would you think: "I usually do the same things that got them into trouble. This is my fault too."	0	1	2
Would you feel bad because you should have gotten into trouble with them?	0	1	2
3. Your class plays a trivia game and your team loses.			
• Would you think: "I did not get all my questions right, this whole thing is my fault."	0	1	2
I would not be able to stop thinking about how it is my fault.	0	1	2
4. You and a partner work on a project. You work hard, but your partner goofs off. You grade.	r project	gets a b	ad
Would you think: "I didn't work hard enough. The bad grade is partly my fault.	0	1	2
I would feel guilty for a long time afterwards.	0	1	2
5. There is a lot of traffic on the road, and you end up late for school.			
Would you think: It is partly my fault. I was late to school."	0	1	2
It would almost hurt to think about what I did.	0	1	2
6. You are late getting home. Your little brother falls and hurts himself.			
• Would you think: "I was late and he got hurt. It is my fault."	0	1	2
Just thinking about what I did would make me want to cry.	0	1	2

Imagine that 7. You guess the number your teacher was thinking of and get the last chocolate milk.	Not at All	A Little	A Lot
7. Tou guess the number your teacher was thinking of and get the last chocolate link.			
Would you think: "Other people did not get chocolate milk and it is partly my fault."	0	1	2
This would bother me the rest of the week.	0	1	2
8. You are playing a board game and get a card that says, "send one player back to the be	ginning	of the ga	ame."
Would you think: "It is partly my fault that my friend is losing now."	0	1	2
I would secretly hope to end up losing.	0	1	2
9. Your friend gets into a lot of trouble at school for talking during class.			
Would you think: "It is my fault because I was not there to help him."	0	1	2
I would feel really bad for what I failed to do.	0	1	2
10. You get sick, so your family cannot go to the movies.			
Would you think: "This is all my fault."	0	1	2
I would feel so guilty I would have trouble thinking straight.	0	1	2
11. While walking down the hallway, you see your teacher talking to the principal and lo	oking at	you.	
Would you think: "I must have done something wrong."	0	1	2
I would feel too guilty to look back.	0	1	2
12. You decide to sit in a different seat for class. Someone sitting in your old seat gets his breaks.	urt when	the chai	r leg
Would you think: "Why did I switch seats? She got hurt because of me."	0	1	2
It would be hard for me to stop thinking about what I did.	0	1	2
13. You left your homework on the kitchen table and your parents throw it out.			
Would you think: "It is my fault."	0	1	2
I would have trouble sleeping just thinking about it.	0	1	2

Imagine that  14. You and a friend are skipping rocks on a pond. Your friend throws his rock at a tree.	Not at All His roc	A Little	A Lot bird.	
Would you think: "The bird got hurt because of me."	0	1	2	
I would feel so guilty I wouldn't want to skip rocks again.	0	1	2	
15. You go trick-or-treating for Halloween. You pick a candy that ends up tasting bad.				
Would you think: "It is my fault. I picked a bad candy."	0	1	2	
In my head, I would keep thinking about it.	0	1	2	
16. Your grandparents are away on vacation and forget to send you a birthday card.				
Would you think: "I did something wrong."	0	1	2	
I would keep thinking of all the bad things I did that might have caused it.	0	1	2	
17. You are mad a teacher and don't want to take her test. You think, "I hope she gets sick she does get sick.	ck" and	the next	day	
Would you think: "It is my fault she got sick."	0	1	2	
My heart would feel bad because of what I did.	0	1	2	
18. You and your friends are playing basketball and your friends get into a fight.				
Would you think: "It's my fault they got in a fight."	0	1	2	
I would feel too guilty to look at my friends.	0	1	2	
19. Your friend gets a flat tire on his bike. He is carrying your present to your birthday pa	arty.			
• Would you think: "It is my fault his tire is flat."	0	1	2	
My head would almost hurt thinking about how his tire is flat because of my party.	0	1	2	
20. Your mother says she wants a certain book for her birthday. You get her that book, but she does not like it.				
Would you think: "It is my fault, I ruined her birthday."	0	1	2	
I would feel bad every time I saw the book.	0	1	2	

Imagine that	Not at All	A Little	A Lot	
21. You and a friend go for a swim, and your friend gets sick.				
Would you think: "It was my fault he got sick."	0	1	2	
I would be disgusted with myself.	0	1	2	
22. You go to a movie with a friend. Your friend got in trouble for not doing her homewo	ork.			
Would you think: "I am to blame for her getting into trouble."	0	1	2	
• I would feel so guilty I wouldn't be able to look at myself.	0	1	2	
23. Your mother made your lunch. It leaked all over your homework in your book bag.				
Would you think: "It's my fault that my homework got ruined."	0	1	2	
• I would think: "I'll never pack my own bag again."	0	1	2	
24. A game gets stolen from your locker.				
Would you think: "My parents should be mad at me."	0	1	2	
I would feel really guilty.	0	1	2	

#### APPENDIX D

### OTHER MEASURES

1) Test of Self-Conscious Affect- Child version (TOSCA-C)

Here are some situations that might happen to you once in a while. And here are some different ways that people might think or feel.

Really imagine that you are in the situation now and imagine how you might think or feel. Then read each statement Then indicate how likely it is that the statement would be true for you.

<u>There are no right or wrong answers to these questions.</u> We're simply interested in your own thoughts and ideas about these situations.

For example:

You wake up very early one morning on a school day.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I would eat breakfast right away	1	2	3	4	5
b) I would not feel like getting out of bed	1	2	3	4	5

1.	You are on patrol duty and you turn in t	three kids.				
		Not at all likely		Maybe (half & half)	Likely	Very likely
	a) I'd worry about what would happen to them	1	2	3	4	5
	b) I'd think, "I'm a tattletale."	1	2	3	4	5
2.	Your aunt is giving a big party. You are one all over the floor.	e carrying	drinks for	people a	nd you spi	ill
		Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
	a) I should have been more careful	1	2	3	4	5
	b) I would run upstairs to be away from everybody	1	2	3	4	5
3.	You get a test back in school and it didn	n't go wel	1.			
		Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
	a) I'd feel that I should have done better, I should have studied more	1	2	3	4	5

b) I'd feel stupid.....

4.	You stop playing all the time with one friend to play with someone who doesn't
have a	y friends.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I'd feel bad because it's not fair to forget about one friend when you make another	1	2	3	4	5
b) My other friends might think I'm weird, playing with somebody who doesn't have any friends	1	2	3	4	5

# You woke up one morning and remember it's your mother's birthday. You forgot to get her something.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) After everything she's done for me, how could I forget here birthday?	1	2	3	4	5
b) I would feel irresponsible and thoughtless	1	2	3	4	5

## 6 You trip in the cafeteria and you spill your friend's milk.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I'd be thinking that everyone is watching me and laughing	1	2	3	4	5
b) I would feel sorry, very sorry. I should have watched where I was going	1	2	3	4	5

7. You were talking in class, and your friend got blamed. You go to the teacher and tell him the truth.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I would feel like I always get people in trouble	1	2	3	4	5
b) I'm the one who should get in trouble. I shouldn't have been talking in the first place	1	2	3	4	5

8. You accidentally break your aunt's vase. Your aunt scolds your little cousin instead of you.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) If I didn't tell the truth, something inside would bother me	1	2	3	4	5
b) No one is going to like me if my cousin tells on me	1	2	3	4	5

9. Your report card isn't as good as you wanted. You show it to your mother when you get home.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) Now that I got a bad report card, I'm worthless	1	2	3	4	5
b) I should listen to everything the teacher says and study harder	1	2	3	4	5

10. You and your best friend get into an argument at school.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I would feel sorry and feel like I shouldn't have done it		2	3	4	5
b) I'd probably feel real lousy about myself	1	2	3	4	5

11. Your teacher writes your name on the board for chewing gum in class.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I'd slide down in my chair, embarrassed	1	2	3	4	5
b) If I was chewing gum it would serve me right because it's a rule	1	2	3	4	5

12. You get your report card and tell your best friend you made the honor roll. You fid out your friend did not.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I'd feel bad because I was bragging about it and I made my friend feel bad	1	2	3	4	5
b) My friend might think I'm a show-off	1	2	3	4	5

13. You and your friend are talking in class, and you get in trouble.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) I'd think that I shouldn't have talked in the first place. I deserve to get in trouble	1	2	3	4	5
b) I'd feel like everyone in class was looking at me and they were about to laugh	1	2	3	4	5

14. You invite a friend to sleep over. But when you ask your mother she says no.

	Not at all likely	Unlikely	Maybe (half & half)	Likely	Very likely
a) Since I already asked my friend, I'd feel kind of embarrassed	1	2	3	4	5
b) I'd feel sorry I asked my friend before I asked my mom. Now my friend will be disappointed.	1	2	3	4	5

15. Your teacher picks one student to do something special. She picks you.

			Maybe		
	Not at		(half &		Very
	all likely	Unlikely	half)	Likely	likely
a) I'd be wondering how the other students felt—the ones that didn't get picked	1	2	3	4	5
b) My friend will think I'm the teacher's pet	1	2	3	4	5

## 2) Shame and Guilt Scale (SGS)

### WHAT IF?

Here are some situations that might happen to you once in a while. Read each one and imagine how upset you would be if it happened to you.

There are no right or wrong answers to these questions. We're simply interested in your own thoughts and ideas about these situations.

<b>W</b> 714	:c	Not at all upset		Some- what Upset		Very Upset
What	11					
1.	You do something embarrassing in public.	1	2	3	4	5
2.	You secretly cheat on something and you know you will not get caught.	1	2	3	4	5
3.	You hurt someone's feelings.	1	2	3	4	5
4.	You are the center of attention.	1	2	3	4	5
5.	You appear weak to other people.	1	2	3	4	5
6.	You behave meanly to others.	1	2	3	4	5
7.	Other people find out something bad about you.	1	2	3	4	5
8.	You feel shy in front of others.	1	2	3	4	5
9.	You behave unkindly.	1	2	3	4	5
10	You don't say anything when a cashier gives you too much change.	1	2	3	4	5

### 3) Children's Negative Cognitive Error Questionnaire (CNCEQ)

### Children's NCE Questionnaire

Below are described several things that might happen to kids. Each thing is followed by a thought that a kid in that situation might have. This thought is in "quotes." We want to know how similar this thought is to what you might think if this thing happened to you.

Please read each situation with me and imagine that it is happening to you even if it never really has. Then read the thought that is in "quotes." Circle the answer that is under each thought that best tells how much the thought is like what you would think if this thing happened to you.

### For example:

You are the goalie for your soccer team. The game ends in a 1-1 tie. After the game you hear one of your teammates say that your team should have won today. You think, "He/she thinks that it is my fault we didn't win."

How much is this thought like what you would think? (circle one)

almost a lot somewhat only a little not at all exactly like it like it like it

Read each statement with me. If you have a question, raise your hand. Remember, no one else will see your answers, so try to be as honest as possible.

1. You invite one of your friends to stay overnight at your house. Another one of your friends finds out about it. You think, "He/she will be real mad at me for not asking them and never want to be friends again."

How much is this thought like what you would think? (circle one)

almost a lot somewhat only a little not at all exactly like it like it like it

How much is this thought like what you would think? (circle one)

almost a lot somewhat only a little not at all exactly like it like it like it

<sup>2.</sup> Your class is having 4-person relay races in gym. Your team loses. You think, "If I had just been faster we would not have lost."

3. You are trying out two outs. You think,			up four times and get tw	o hits and make
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
4. Your team loses a wouldn't have lost."	spelling contest. T	The other team won	easily. You think, "If I	were smarter, we
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
			o try out for the school s se of trying out, I could	
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
			nath homework. He/she They didn't want to talk	
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
	our group a poor g		project. Your teacher die I hadn't done such a lo	
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it

free time to play a gar	ne with another stu Now another of yo	dent. Last week	eacher lets that student have it was one of your friend's ng to get to choose someon	birthday and they
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
	<b>U</b> 1		you he would like to talk to g and doesn't want me on th	•
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
with some other kids i	nstead of you. Lat ome. Later that ni	er you and your ght you think, "N	you first got there your frie friend decide to stop at his/ My friend didn't seem to wa (circle one)	her house for a
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
11. You forgot to do think, "The teacher is			cher tells the class to hand ton't pass."	hem in. You
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
12. You were having poorly on the quiz. Y			eriod when you had a math waste of time."	quiz. You did
How much is this thou	ight like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it

13. You play basketh "I played poorly."	oall and score 5 bas	skets but missed to	wo real easy shots. After th	ne game you think,
How much is this tho	ught like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
	d the teacher is pas		he things you had read. To You think, "I'll probably f	
How much is this tho	ught like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
15. You spent the day You think, "Today w		nouse. The last ho	our before leaving you were	e really bored.
How much is this tho	ught like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
			e class that he does not thin o ski faster, I wouldn't be h	
How much is this tho	ught like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
	_		e was really hard. When it m going to have trouble wi	
How much is this tho	ught like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
	ur friends because	of having to work	neighbors. Twice this week a. As you see your friends it do anything with me."	
How much is this tho	ught like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it

heard another student i	in your class tellir	ng someone he was	l you weren't invited. This thinking of getting some	1 2
go to a movie. You th	ink, "It'll be just l	ike last week, I wo	n't be asked to go."	
How much is this thou	ght like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
			you that he would like to nt and is going to give me	
How much is this thou	ght like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
21. You're with two oboth say they can't. Y			ld like to go to a movie th want to go with me."	is weekend. They
How much is this thou	ght like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
22. Your cousin calls be able to keep up and			ng bike ride. You think, '	'I probably won't
How much is this thou	ght like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
	nt. The last word		e the last one up for your t d you got it wrong. When	
How much is this thou	ght like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it
24. Last week you pla play soccer. You thin			oday some kids from your good at sports."	class ask you to
How much is this thou	ght like what you	would think?	(circle one)	
almost exactly	a lot like it	somewhat like it	only a little like it	not at all like it

## 4) Children's Social Desirability (CSD)

This questionnaire lists a number of experiences that most children have at one time or another. Read each of these carefully. After you have read one, decide whether it does or does not fit for you. If it does, circle True; if it doesn't, circle False.

1. I never act "fresh" or "talk back" to my mother or father.	TRUE	FALSE
2. I feel my parents are not always fair.	TRUE	FALSE
3. Sometimes I feel like throwing or breaking things.	TRUE	FALSE
4. I never shout when I feel angry.	TRUE	FALSE
5. I always help people who need help.	TRUE	FALSE
6. Sometimes I argue with my mother because she won't let me do what I want to do.	TRUE	FALSE
7. I never say anything that would make a person feel bad.	TRUE	FALSE
8. I am always polite, even to people who are not very nice.	TRUE	FALSE
9. Sometimes I do things I am told not to do.	TRUE	FALSE
10. I always listen to my parents.	TRUE	FALSE
11. I never forget to say "please" and "thank you."	TRUE	FALSE
12. Sometimes I wish I could just "mess around" instead of having to go to school.	TRUE	FALSE
13. Sometimes I dislike helping my parents even though I know they need my help around the house.	TRUE	FALSE
14. Sometimes I try to get even when someone does something to me I don't like.	TRUE	FALSE
15. I sometimes feel angry when I don't get my way.	TRUE	FALSE
16. I sometimes feel like making fun of other people.	TRUE	FALSE
17. I have never borrowed anything without asking permission first.	TRUE	FALSE
18. I am always glad to work with others.	TRUE	FALSE
19. Sometimes I don't like to obey my parents.	TRUE	FALSE
20. Sometimes I get mad when people don't do what I want.	TRUE	FALSE

## 5) Child Depression Inventory (CDI)

/ 1	2			
Pick one sentence from each	group tha	at best fits you for the past two weeks.	There are no right or wrong answers.	Just t
as honest as possible.				
1.		I am sad once in a while		

1.	 I am sad many times I am sad all the time
2.	 Nothing will ever work out for me I am not sure if things will work out for me Things will work out for me O.K.
3.	 I do most things O.K. I do many things wrong I do everything wrong
4.	 I have fun in many things I have fun in some things Nothing is fun at all
5.	 I am bad all the time I am bad many times I am bad once in a while
6.	 I think about bad things happening to me once in a while I worry that bad things will happen to me I am sure that terrible things will happen to me
7.	 I hate myself I do not like myself I like myself
8.	 All bad things are my fault Many bad things are my fault Bad things are not usually my fault
9.	 I feel like crying everyday I feel like crying many days I feel like crying once in a while
10.	 Things bother me all the time Things bother me many times Things bother me once in a while
11.	 I like being with people I do not like being with people many times I do not want to be with people at all
12.	 I cannot make up my mind about things It is hard to make up my mind about things I make up my mind about things easily
13.	 I look O.K. There are some bad things about my looks I look ugly

14 _ _	<ul> <li>I have to push myself all the time to do my schoolwork</li> <li>I have to push myself many times to do my schoolwork</li> <li>Doing schoolwork is not a big problem</li> </ul>
15 	I have trouble sleeping every night I have trouble sleeping many nights I sleep pretty well
16 	I am tired once in a while I am tired many days I am tired all the time
17 _ _	Most days I do not feel like eating Many days I do not feel like eating I eat pretty well.
18 	I do not worry about aches and pains I worry about aches and pains many times I worry about aches and pains all the time
19 	I do not feel alone I feel alone many times I feel alone all the time
20	I never have fun at school I have fun at school only once in a while I have fun at school many times
21	I have plenty of friends I have some friends but I wish I had more I do not have any friends
22	<ul><li>My schoolwork is alright</li><li>My schoolwork is not as good as before</li><li>I do very badly in subjects I used to be good in</li></ul>
23	I can never be as good as other kids I can be as good as other kids if I want to I am just as good as other kids
24	Nobody really loves me I am not sure if anybody loves me I am sure that somebody loves me
25	I usually do what I am told I do not do what I am told most times I never do what I am told
26	I get along with people I get into fights many times I get into fights all the time