

EFFECTS OF CHILD ETHNICITY ON RATERS'  
JUDGMENTS OF ADHD

By

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EFFECTS OF CHILD ETHNICITY ON RATERS'  
JUDGMENTS OF ADHD

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## CHAPTER I

### INTRODUCTION

One of the most common psychological disorders affecting children is Attention-Deficit/Hyperactivity Disorder (ADHD). As indicated in the revised fourth edition of the *Diagnostic and Statistical Manual for Mental Disorders* (DSM IV-TR; American Psychiatric Association (APA), 2000), the disorder is marked by a frequent pattern of inattention and/or hyperactivity-impulsivity. Although both inattention and hyperactivity-impulsivity are symptoms that are present in many individuals with ADHD, others may present with a dominant pattern of either inattention or hyperactivity-impulsivity. Thus, there are three possible subtypes of ADHD: primarily inattentive type, hyperactive/impulsive type, or combined type. In order to constitute a diagnosis of ADHD, these symptoms must interfere with appropriate development of social, academic, or occupational functioning, and cause impairment in at least two settings (e.g., at home and at school). Although many individuals are not diagnosed until after these behaviors have caused impairment for several years, at least some symptoms must have been present before age seven. Finally, these symptoms must not be better accounted for by any other mental disorder.

According to descriptions of ADHD in the *DSM-IV-TR* (APA, 2000), symptoms are typically most prominent during the early elementary grades. It is difficult to establish a diagnosis in children younger than four or five years old because characteristic behaviors of younger children may include some hyperactivity and impulsivity. In

addition, younger children typically do not experience very many demands for sustained attention. ADHD is also harder to recognize in older children because symptoms usually become less conspicuous as children mature (APA, 2000).

It is estimated that 3% to 7% of school-aged children have ADHD. Reported rates vary depending on the nature of the population sampled and the method of ascertainment (APA, 2000). Though this 3 to 7% prevalence rate has not been separated out by ethnicity, it has been separated out by sex. ADHD is more prevalent in males than it is in females. Male-to-female ratios range from 2:1 to 9:1 (APA, 2000). These ratios vary depending on the subtype, as the sex ratio appears to be more pronounced in the predominantly hyperactive-impulsive and combined subtypes and less pronounced in the predominantly inattentive subtype. These ratios also vary depending on the population setting. Ratios are less pronounced in a non-referred setting and more pronounced in a clinical setting, as clinic-referred children are more likely to be boys (APA, 2000). Boys tend to be over-represented in clinical settings because they are more likely to have an ADHD that is comorbid with Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD) (APA, 2000). Therefore, boys with comorbid disorders are more likely to be referred for services than girls because they tend to be more disruptive.

ADHD also occurs in many cultures, with variations in reported prevalence (APA, 2000; Nolan, Gadow, & Sprafkin, 2001). The *DSM-IV* (APA, 2000) simply states that prevalence varies between cultures, but it does not specify whether prevalence rates differ among minority groups in the United States. Results from a 2001 study by Nolan et al., examining prevalence of ADHD, ODD, and CD in a diverse sample of approximately 3,000 children ages 3 to 18 years old, showed discrepancies in prevalence rates between



African American and Caucasian children. Specific to ADHD, results revealed differences between *DSM-IV* ADHD subtypes with regard to age, gender, and ethnicity. The screening prevalence rate of ADHD behaviors was 15.8%; 9.9% for primarily inattentive type, 2.4% for hyperactive-impulsive type, and 3.6% for combined type. Inattentive type was relatively uncommon in preschool children and hyperactive-impulsive type was least common in teenagers. Screening prevalence rates were higher for male than female students, and higher for African-American than Caucasian students.

Variations in prevalence rates may be accounted for by a lack of cross-cultural validity in assessment measures, particularly in behavior rating scales, and possible rater biases in those completing assessment measures. Although variations in reported prevalence are likely to be a result of different diagnostic practices, one cannot rule out the possibility that differences in clinical presentation of ADHD among different cultures may also be a contributing factor to variations in reported prevalence. As ethnic minority populations in the United States have continued to increase over the last decade and as the United States becomes more culturally diverse (Brewer & Suchan, 2001), it is important to consider ethnicity when examining prevalence rates of psychological disorders. When compared to the vast number of studies examining prevalence rates of ADHD, not many have examined the prevalence rates across different ethnicities. Among the limited number of studies examining ethnicity and prevalence rates in recent years, there are several discrepancies in the findings, which are reviewed below.

## CHAPTER II

### REVIEW OF RELEVANT LITERATURE

#### *Rater Biases*

A 1997 study by Andrews, Wisniewski, and Mulick examined variables influencing teachers' decisions to refer children for psychological services. Among these variables were age, height, weight, sex, and ethnicity. Two separate clinic referred samples were used in the study. The first sample was comprised of 78 boys and 62 girls, ages 4 to 18 years old, who were referred for a psychoeducational evaluation to rule out a developmental handicap (DH). The second sample consisted of 70 boys and 3 girls, ages 6 to 17, referred for an evaluation to rule out a severe behavior handicap (SBH). Children in both groups were Caucasian, African American, and 'Other.' Results indicated that boys were more likely to be referred to the SBH group than girls. With regard to ethnicity, more African American children were referred to the DH group than Caucasian children. Although this study did not specifically examine disruptive behavior disorders, teachers were more likely to refer boys and African American children for an evaluation to receive psychological services. Thus, children at-risk for disruptive behavior disorders were likely included in their SBH group.

In a 1998 study, Dominguez de Ramirez and Shapiro compared teacher ratings of ADHD in Caucasian and Hispanic children, ages 6 through 11 years old. Measures used were the Teacher Report Form of the CBCL (Achenbach & Edelbrock, 1983), the Attention Deficit Hyperactivity Disorder Scale-IV (DuPaul, Power, Anastopoulos, &

Reid, 1998), and the Conners Abbreviated Teacher Rating Scale (Conners, 1989).

Emphasis was placed on ethnicity of the rater, as 61 Caucasian teachers each rated one Caucasian and one Hispanic student from their respective classrooms. A total of 66 girls and 56 boys were rated. Results indicated that overall, girls were rated as less hyperactive and inattentive than boys. Results indicated that Hispanic students were rated similar to or less symptomatic than Caucasian students. This could imply that Hispanic children may be less or equally likely than Caucasian children to screen positive for ADHD.

Weisz and McCarty (1999) designed a study in attempt to examine the validity of ADHD assessments for children from diverse backgrounds based on the use of parental reports. This issue is difficult to address, considering parents and children tend to come from the same culture. To address this potential problem, the study used a bicultural model to explore the possibility that a parent's cultural background could bias his or her report of his or her child's behavior. A sample of 50 bicultural families, each with an ethnic Thai parent reared in Thailand and a Caucasian parent reared in the US, participated in this study. Both parents filled out the Child Behavior Checklist (CBCL; Achenbach, 1991; Achenbach & Edelbrock, 1983) and the Thai Youth Checklist (TYC; see Weisz et al., 1987, 1993) to rate their child's behavior. Child ages ranged from 5 to 18 years old. There were no significant differences between Thai and American parents' ratings of their child's behavior. Results showed no parental culture effects to be significant, thus denying biasing effects of parental culture.

In a follow-up study to the previous study by Dominguez de Ramirez and Shapiro (1998), Dominguez de Ramirez designed another study (2001) to examine whether teacher ratings of student behavior problems vary according to teacher-student ethnic

differences. In the study, Hispanic and Caucasian teachers observed standardized videotapes of an 11-year-old Hispanic child and an 11-year-old Caucasian child engaged in the same behaviors. After viewing the videotapes, teachers used a rating scale to assess each child for hyperactive-inattentive behaviors. Results from the study showed substantive and reliable differences in ratings of hyperactive-impulsive behaviors among Hispanic and Caucasian teachers. Since teachers in the study viewed identical tapes, the discrepancies were considered to be more likely due to differences in judgments of hyperactive/disruptive behavior rather than to distinctions in actual symptom level. There was an interaction between teacher ethnicity and child ethnicity. Hispanic teachers were more likely than Caucasian teachers to report scores above the clinical cutoffs for Hispanic children, but not for Caucasian children. Overall, it was suggested that teachers' reports of ADHD behavior in minority samples should be viewed with caution since the use of the published cutoffs to determine the level of pathology appeared questionable with Hispanic groups.

In a 2001 study, Reid, Casat, Norton, Anastopoulos, and Temple used a sample of African American and Caucasian teachers and children to examine the normative equivalence and construct equivalence of the teacher IOWA Conners Rating Scale (IOWA Conners; Pelham, Milich, Murphy, & Murphy, 1989) which measures inattention/overactivity and aggression. Normative equivalence refers to whether a measure is accurate and reliable when used for populations that may differ from the population in which the measure was normed. Construct equivalence refers to whether an assessment accurately measures the construct that it was designed to measure. One purpose of the study was to investigate whether rater ethnicity would affect ratings.

Teachers completed the IOWA Conners on each child in his or her class. There appeared to be construct equivalence across Caucasian and African American groups but normative equivalence was questionable. Differences in distributions of IOWA scores and mean differences across the African American and Caucasian groups were present. Although there was no main effect of teacher ethnicity, there was an effect for child ethnicity. Specifically, African American children were rated as more inattentive, overactive, and aggressive than Caucasian children. This leads to an increased likelihood for an African American child to screen positive for a disruptive behavior disorder than a Caucasian child.

In a follow-up study, Temple (2002) addressed whether discrepancies in prevalence rates between African-American and Caucasian children were due to actual ethnic differences in behavior or a lack of cross-cultural validity in current assessment practices. Temple investigated the impact of child ethnicity on teacher perceptions of ADHD symptoms. Caucasian teachers and African American teachers viewed videotaped segments of two Caucasian and two African American boys interacting with their mother in a playroom. Each ethnic pairing included one boy with an ADHD diagnosis and one normal control. Teachers rated each child's behavior using measures of inattention, hyperactivity-impulsivity, noncompliance, and anger. African American teachers rated all children as having more symptoms of ADHD and Oppositional Defiant Disorder (ODD) than Caucasian teachers. African American children in the ADHD condition were also rated as having more inattentive, more hyperactive-impulsive, and more oppositional symptoms than Caucasian children by both teachers. Results indicate that African American children may be more likely to screen positive for disorders than Caucasian

children, and that Caucasian and African American children may be more likely to screen positive for a disorder when rated by an African American teacher.

Schmitz and Velez (2003) investigated cultural differences in maternal assessments of ADHD symptoms in Hispanic children. The study addressed the extent to which ethnicity and acculturation influenced Hispanic mothers' perceptions of ADHD-related behaviors in their 7 to 10 year old children. The sample was taken from a cohort of young women who were interviewed annually since 1979 through the National Longitudinal Surveys of Youth data set. Child ADHD was assessed from the 1994 and 1996 interviews using four items from the Behavior Problems Index (Zill & Peterson, 1986). Acculturation was assessed through the proportion of interviews done in Spanish, number of generations in the mother's family born in the U.S., and the mothers' self-identified ethnicity.

Results indicated an important role for acculturation in mothers' perceptions of ADHD-related behaviors but only in ratings of hyperactivity/impulsivity and not ratings of inattention. Those who were least acculturated were more likely to report symptoms of restlessness in their children and less likely to rate their children as impulsive. Schmitz and Velez (2003) suggested that "less acculturated mothers have higher expectations about the controllability of their children and may adopt more permissive attitudes toward child behavior as they become more acculturated" (p. 118). Schmitz and Velez also reported that "mothers from [Hispanic] cultures and at different levels of acculturation differently assess specific symptoms of ADHD, indicating the need for careful assessment of the validity of the disorder for [Hispanic] families" (p. 118).

Arnold et al. (2003) found ethnic differences between parent and teacher informants. In the study, African American and Hispanic participants, ages 7 to 9 years old, were matched with randomly selected Caucasian participants of the same sex. Parent and teacher informants rated children on ADHD and ODD symptoms using behavior-rating scales. Results of the study showed differences in teacher-rated ADHD and ODD symptoms between African American and Caucasian participants and an overall difference in parent-rated ODD symptoms between Hispanic and Caucasian participants. In all cases minority groups were rated as more symptomatic. Results from this study imply that regardless of whether they were rated by a teacher or by a parent, children of ethnic minority status may be more likely to screen positive for disruptive behavior disorders, such as ADHD, than Caucasian children. It is still unclear whether African American and Hispanic children are actually more disruptive than Caucasian children or if the difference is due to a rater bias.

#### *Negative Halo Effects*

Variations in prevalence rates of ADHD among boys and girls, and between Caucasians and ethnic minority samples may also be influenced by another type of bias, *negative halo effects*. Previous research has found negative halo effects in which the likelihood of a child being rated as inattentive or hyperactive increases, even in the absence of inattentive and hyperactive symptoms, when the child exhibits oppositional behaviors (Abikoff, Courtney, Pelham, & Koplewicz, 1993; Hartung, Van Pelt, Armendariz, & Knight, 2005; Jackson & King, 2004; Schachar, Sandberg, & Rutter, 1986; Stevens, Quittner, & Abikoff, 1998; Temple, 2002). These negative halo effects studies will be reviewed next.

Schachar et al. (1986) found that teachers rated boys as hyperactive and defiant after observing boys who displayed defiance, but not hyperactivity. However, boys who displayed hyperactive behaviors were only rated as hyperactive, and not defiant. Thus, this negative halo was a unidirectional. Abikoff et al. (1993) also found a unidirectional negative halo effect. In the study, teachers who watched a videotape of a boy displaying oppositional behaviors rated the boy as having symptoms of oppositionality and inattention/overactivity. However, the boy displaying inattentive/overactive behaviors was only rated as having inattentive/overactive symptoms, and was not rated as having symptoms of oppositionality. A 1998 study by Stevens, Quittner, and Abikoff revealed similar results. In this study, teachers who watched a videotape of a boy with pure oppositionality had a tendency to rate the boy as inattentive and hyperactive in addition to oppositional. However, they did not rate a boy with inattention and hyperactivity symptoms as displaying oppositionality symptoms.

Temple (2002) also found a unidirectional halo effect. However, the negative halo effect found by Temple was in the opposite direction of the effects found by Abikoff et al. (1993), Schachar et al. (1986) and Stevens et al. (1998). All of these studies showed a unidirectional negative halo effect in teachers' ratings of boys' behavior such that the presence of oppositionality artificially inflated ratings of ADHD (i.e., inattention and hyperactivity). In Temple's study, however, teachers had a tendency to inflate ratings of oppositionality for boys who displayed symptoms of ADHD, even in the absence of oppositional behaviors. This effect was present for Caucasian boys and for African American boys.



The above-mentioned studies only showed negative halo effects for boys. Since the behavior of girls was not rated in any of these studies, it cannot be determined whether these effects are generalizable to girls. Although Temple (2001) explored these effects within Caucasian and African American boys, it also cannot be determined whether these effects are generalizable to other ethnic groups.

A more recent study by Jackson and King (2004) examined sex differences in halo effects. Jackson and King created videotapes using scripts from the Abikoff et al. (1993) study. The Abikoff study included three tapes of boys (i.e., a boy displaying typical behaviors, a boy displaying symptoms of pure ADHD, and a boy displaying symptoms of pure ODD). Jackson and King used child actors to create a male and female version of each of these tapes. Teachers viewed a tape of a typical child followed by either a tape of a child with ADHD or a tape of a child with ODD of the same sex. Results revealed bi-directional negative halo effects. The presence of oppositional behaviors artificially inflated teachers' ratings of inattention and hyperactivity, and the presence of inattentive and hyperactive behaviors artificially inflated teachers' ratings of oppositionality. These negative halo effects were present for both boys and girls. Although Jackson and King extended the negative halo effects findings to girls, they did not specifically examine sex biases in teacher ratings of disruptive behavior nor did they examine effects of ethnicity on negative halos.

Hartung et al. (2005) investigated whether sex of rater and/or sex of child would impact a rater's judgment of a child's behavior. In this study, college students listened to vignettes featuring a child engaged in behaviors consistent with a specific disorder and completed a *DSM-IV* checklist based on the vignette. Disorders portrayed on each

vignette were ADHD-Predominantly Inattentive Type (ADHD-PI), ADHD Combined Type (ADHD-CT), ODD, and Major Depressive Disorder (MDD). Each vignette described a child as having the symptoms of the targeted disorder and no other symptoms.

No significant main effects or interactions were found for target dimensions and non-target dimensions. However, results did indicate that participants were likely to endorse symptoms of hyperactivity for the child on the ODD and ADHD-PI vignettes, although the particular vignettes did not mention any hyperactive behaviors. Similarly, ratings of oppositionality were more elevated for the ADHD-CT vignette than for the ADHD-PI and MDD vignettes. Participants were likely to endorse symptoms of oppositionality for the child on the ADHD-CT vignette, although the vignette did not mention any behaviors consistent with ODD. Finally, ratings of inattention were highest in the ADHD-PI and ADHD-CT vignettes, but were also more elevated for the ODD vignette than the MDD vignette. Participants were likely to endorse symptoms of inattention for the child on the ODD vignette, although the vignette did not mention any behaviors related to inattention. In summary, Hartung et al. (2005) did not find any main effects of child sex on adult ratings. However, results suggested that bi-directional negative halo effects might bias ratings of disruptive behavior disorders for boys and girls. Finally, although Jackson and King (2004) and Hartung et al. (2005) extended findings of negative halo effects to boys and girls, it still cannot be determined whether these effects extend to other ethnicities.

### *Implications for Possible Bias*

Regardless of age, gender, SES or culture, children with ADHD are at risk for educational and behavioral problems. Symptoms of inattention may affect class-work and academic performance, and hyperactivity and impulsivity may result in behavior that is difficult to manage by parents and teachers. Many children with ADHD are placed in special education programs for children with learning disabilities or behavioral disorders. It is important that children with ADHD receive necessary interventions to help prevent more adverse outcomes in later childhood, adolescence, and adulthood. The ability to recognize symptoms and obtain an accurate diagnosis is the first step to ensuring that the proper intervention is received.

Temple (2002) provided useful guidelines for the assessment of ADHD. According to Temple, an ideal assessment of ADHD should be comprehensive and multimodal, involving background interviews, structured and semi-structured interviews, behavior rating scales completed by teachers and parents, and behavioral observations. The use of multimodal assessments and data gathered from a variety of instruments is beneficial in reducing the influence of bias in the assessment process. According to Temple, it is unfortunate that not all children with diagnoses of ADHD are diagnosed based on comprehensive assessments. It is actually more common for diagnoses to be made based only on information obtained from brief interviews with parents and behavior rating scales completed by parents and teachers. Based on these guidelines, it is important for parents and teachers to make as accurate and unbiased ratings as possible when using these measures. If this is not the case, new assessment procedures may be necessary.

According to Reid et al. (2001), in the last decade, little attention was given to the use of behavior rating scales across different ethnic groups because it was commonly believed that the expression, course, and outcome of ADHD was universal and independent of cultural factors. However, if this were true, there would be no differences in reported prevalence rates across ethnic groups. Consequently, the use of behavior rating scales across different ethnic groups is beginning to receive increasing attention in a growing body of literature, specifically with regard to possible rater biases across culture (Arnold et al., 2003; Dominguez de Ramirez, 2001; Nolan, Gadow, & Sprafkin, 2001; Reid et al., 2001; Temple, 2002).

Although ADHD is one of the most researched childhood disorders, the number of studies pertaining to prevalence of ADHD and the use of behavior rating scales in ethnic minority populations is limited. Research in this area provides evidence that individual and cultural differences in parent and teacher perceptions can influence rating scale scores, which suggest that the validity of the rating scales for the assessment of ADHD in minority children is questionable. Research on ADHD concerning minority populations has mainly compared Caucasians and African Americans (Andrews et al., 1997; Arnold et al., 2003; Calhoun, 1975; Nolan, Gadow, & Sprafkin, 2001; Reid et al., 2001; Temple, 2002). Only a limited number of studies have compared Caucasians and Hispanics (Dominguez de Ramirez & Shapiro, 1998; Dominguez de Ramirez, 2001; Schmitz & Velez, 2003), and other cultures (Weisz & McCarty, 1990).

### CHAPTER III

#### THE CURRENT STUDY

The purpose of the current study was to expand studies of rater bias to include an examination of child ethnicity. Hartung et al. (2005) examined sex of rater and sex of child in adults' ratings. In the current study, both child sex and child ethnicity (i.e., Hispanic and Caucasian) were examined. Sex of rater was not examined in the current study because the complexity of the design was increased by adding ethnicity. In addition, there were no sex of rater differences identified in the Hartung et al. (2005) study. Given that there are more female undergraduate psychology majors than males, and that parents and teachers who complete ratings for ADHD assessments are more likely to be women, only college women were recruited to participate in the current study.

The current study examined the possibility of a rater bias in judgment of children's behavior and addressed the following research questions: (1) Does child ethnicity impact ratings of child behavior? (2) Do negative halo effects generalize across both sexes and ethnicities? (3) Does the interaction between child sex and child ethnicity impact ratings of child behavior?

With regard to the first research question it was expected that there would be main effects for child ethnicity, such that Hispanic children would be rated as more hyperactive, inattentive, oppositional, and depressed than Caucasian children. With regard to negative halo effects, it was expected that bi-directional negative halo effects

would exist for ratings of externalizing disorders, such as ADHD and ODD, for boys and girls, as well as for Hispanic and Caucasian children. Specifically, it was expected that the presentation of oppositional behaviors would inflate ratings of hyperactivity and inattention and that inattentive and hyperactive/impulsive behaviors would inflate ratings of ODD. No negative halo effects were expected between externalizing and internalizing disorders.

Finally, with regard to the third research question, Child Sex  $\times$  Child Ethnicity interactions were expected. It was expected that Hispanic girls would be rated as more inattentive and depressed than any other group, while Hispanic boys would be rated as more hyperactive and oppositional than any other group. Thus, it was also expected that negative halo effects for externalizing disorders would be more pronounced in Hispanic boys compared to other groups.

Research in this area is important for helping to accurately identify disruptive behaviors disorders among children of different ethnicities. Given that behavior ratings are commonly used in the assessment of ADHD, identifying any differences in ratings between Hispanic and Caucasian children is important for preventing over- or under-identification of the disorder in the Hispanic population. Identifying any biases in raters' perceptions of behavior is the first step. If biases are identified, correcting these biases will enable professionals in the field to be more accurate in diagnostic procedures and assessments of behavioral problems in children of different ethnicities. Research in this area may also benefit society because professionals working with children may need to be made aware of the risk for certain biases related to ethnicity and sex.

## CHAPTER IV

### METHODOLOGY

#### *Participants*

Participants were recruited from undergraduate psychology and marketing courses at Oklahoma State University and students were offered extra credit for research participation. A short description of the study was posted via internet at [www.experimentrix.com/okstate](http://www.experimentrix.com/okstate). Appointment times were available at this internet website for students who were interested in participating. Each appointment lasted for one hour and up to four participants were allowed to sign up for each administration session.

A convenience sample of 172 female undergraduate students participated as raters in the present study. Participants had to be at least 18 years old to participate in the study. Ages of participants ranged from 18 to 58 years ( $M = 20.52$  years,  $SD = 4.14$ ). Highest level of education completed by participants ranged from 11 to 16 years ( $M = 13.62$ ,  $SD = 1.23$ ). Of the 172 participants, 138 self-identified as Caucasian (80.2%); 10 as Asian/Asian-American (5.8%); nine as American Indian (5.2%); six as African-American (3.5%); four as Hispanic/Latino (2.3%); two as bi-racial (1.2%); and three self-identified as other (1.7%).

#### *Vignettes*

Four vignettes describing child behavior were developed for the present study. The vignettes were adapted from abnormal child psychology textbooks and child clinical

psychology case presentation texts (Barkley, 2000; Oltmanns, Neale, & Davidson, 1999). Each vignette described one emotional or behavioral disorder of childhood including ADHD, Predominately Inattentive Type (ADHD-PI), ADHD, Combined Type (ADHD-CT), ODD, and Major Depressive Disorder (MDD). The type of disorder served as a within-subjects variable in that all participants heard a vignette featuring each of the disorders. Each vignette had four versions. Sex of the child (child sex) in each vignette and ethnicity of the child (child ethnicity) in each vignette served as between-subjects variables. Sex was crossed with ethnicity such that one vignette featured each of the following: a Hispanic boy, a Hispanic girl, a Caucasian boy, and a Caucasian girl. Although ADHD was the disorder of primary concern to investigators of the current study, the ODD and MDD vignettes served as control conditions. Specifically, the ODD and MDD vignettes were used to determine whether one group would be rated higher solely on symptoms of ADHD or if ratings would be elevated for other externalizing (i.e., ODD) and internalizing (i.e., MDD) disorders. In addition, the inclusion of the ODD vignette allowed an evaluation of negative halo effects among externalizing disorders.

### *Measures*

#### *Demographics Form*

A demographic questionnaire was designed for the present study, inquiring about the participant's sex, age, ethnicity, number of years of education completed, current living situation, occupation, household income, marital status, number of siblings, history of special education/learning disabilities, symptoms of emotional or behavioral disturbances in self, siblings, and parents, and symptoms of emotional or behavioral disturbances in any of the participant's children (if applicable). Participants were asked



about symptomatology in their own children in order to determine whether symptomatology levels in participants' children would have an impact on participants' ratings of the children in the vignettes.

### *Behavior Rating Scales*

*Vignette version.* A behavior rating scale was developed for the present study using symptoms for specific disorders as presented in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM IV-TR). Symptoms that define Attention-Deficit/Hyperactivity Disorder-Predominantly Inattentive type (ADHD-PI), Attention-Deficit/Hyperactivity Disorder-Combined type (ADHD-CT), Oppositional Defiant Disorder (ODD), and Major Depressive Disorder (MDD) were included in the rating scale. Participants were asked to indicate how often the child in the vignette was likely to display each symptom on a four-point scale including "Never/Don't Know," "Sometimes," "Often," or "Very Often."

*Self-report childhood version.* The same symptoms used for the vignette report were presented to the participants. Participants used the same four-point scale described above to indicate how often they experienced the respective symptoms during childhood.

*Self-report current version.* The same symptoms used for the ratings described above were presented to the participants. Participants were asked to indicate how often they currently experienced each of the symptoms using the four-point scale mentioned above.

As an additional control factor, self-report measures of participants' childhood and current symptomatology were collected in order to determine whether participants'

own levels of childhood or current symptomatology would influence their ratings of the children depicted in the vignettes.

### *Procedure*

To increase efficiency of the study, participants completed the study in groups of four. First, participants read and signed an informed consent form. Participants were then given a written copy of the first vignette. The experimenter played an audio recording of the vignette and asked the participants to read along. After the vignette was read, the experimenter gave each participant a copy of the Behavior Rating Scale: Vignette version. Participants completed the rating scale based on the child in the vignette presented immediately prior. Although participants completed the study in groups, each participant completed the rating scale independently. The experimenter collected the completed rating scales and the written copy of the first vignette. The experimenter then distributed the second vignette and played the audio recording. Next, the second Behavior Rating Scale: Vignette version was distributed. The experimenter collected the rating scale and second vignette upon completion of the second rating scale. This procedure was repeated for the remaining vignettes.

Vignettes were presented in a set counterbalanced order. Though it would have been prohibitive to include all possible orders, restrictions were set, specifically for within-subjects variables. Each participant rated child behavior for four vignettes. Order of ADHD-PI and ADHD-CT vignettes was of primary concern in the current study. Since both ADHD vignettes describe symptoms of inattention, they were separated by one other vignette. ADHD vignettes were not sequenced together to help ensure that

participants kept symptoms separate when filling out behavior rating scales. Separating the ADHD vignettes restricted the number of possible vignette orders from 24 to 8.

Each participant also heard one vignette describing each of four possible Sex  $\times$  Ethnicity combinations. Therefore, Sex  $\times$  Ethnicity combinations were also counterbalanced. Presentation was restricted so that vignettes would be alternated by sex. This was done to assist participants in keeping each vignette separate and to help limit carry-over effects across vignettes. Based on these restrictions, there were four possible Sex  $\times$  Ethnicity orders. The restrictions mentioned above resulted in a total of 32 possible orders of vignette presentations. Each order was administered to at least five participants.

After completing the behavior ratings scales based on the vignettes, participants were asked to complete the demographics questionnaire, the Behavior Rating Scale: Self-Report Childhood version, and the Behavior Rating Scale: Self-Report Current version. Finally, the participants were debriefed and thanked for their participation.

#### *Data Analyses*

The total number of symptoms endorsed as occurring “often” or “very often” (e.g., total symptom count) on each behavioral dimension (i.e., inattention, hyperactivity, oppositionality, and depression) for each vignette (i.e., ADHD-PI, ADHD-CT, ODD, and MDD) served as dependent variables. Therefore, a total of 16 dependent variables were examined.

In order to examine the hypotheses in the current study, multiple statistical comparisons were conducted. Family-wise Bonferroni corrections were calculated for each set of analyses (e.g., preliminary analyses, sex and ethnicity analyses, negative halo analyses). Resulting alpha values for each family-wise correction ranged from  $p = .002$  to

$p = .006$ . To be conservative,  $p = .001$  was established as the cutoff for significance throughout the data analyses.

Negative halo effects were expected to occur within externalizing behaviors (e.g., presence of oppositionality artificially inflating inattention and hyperactivity ratings) but not across externalizing and internalizing dimensions (e.g., presence of oppositionality artificially inflating depression). Thus, the MDD vignette served as a psychiatric comparison for determining the presence of negative halo effects among disruptive behavior disorders. In order to test for the presence of negative halo effects, a series of paired samples  $t$ -tests were conducted by comparing non-target externalizing dimensions to the non-target internalizing dimension of depression.

## CHAPTER V

### RESULTS

#### *Preliminary Analyses*

*Effects of participant symptomatology.* A series of correlational analyses were conducted to determine whether participants' own levels of childhood or current symptomatology impacted their perceptions of the target child's behavior. Specifically, ratings on each of the four behavioral dimensions (inattention, hyperactivity/impulsivity, oppositionality, and depression) from each of the four vignettes were correlated with relevant dimensions of participants' childhood and current ratings. For example, depression ratings resulting from each of the four vignettes were correlated with participants' childhood ratings of depression and participants' current ratings of depression. This procedure was repeated for inattention, hyperactivity, and oppositionality. A total of eight correlations were conducted for each of the four symptom dimensions, resulting in 32 analyses. None of the correlations between self-report symptom dimensions and target symptom dimensions were significant.

*Effects of symptomatology in children of participants.* Participants were also asked about their parental status. If they indicated that they had children, they were asked to report symptomatology for their own children. In order to determine whether symptomatology in their own children impacted their perceptions of the target child's behavior, additional correlational analyses were planned. However, only nine (5.1%)

participants reported having children of their own. Due to insufficient power for comparing parents to non-parents, these analyses were not conducted.

### *Sex Bias Analyses*

To examine possible sex or ethnicity biases, a series of 2 (child sex)  $\times$  2 (child ethnicity) ANOVAs were conducted for target and non-target dimensions on each of the four vignettes, using symptom count as the dependent variable. Thus, a total of 16 between-subjects ANOVAs were conducted. None of the 16 ANOVAs resulted in any significant main effects of child sex or child ethnicity in the vignettes. In addition, none of the Child Sex  $\times$  Child Ethnicity interactions were significant. Results for the target dimensions are shown in Table 1 and results for target and non-target dimensions are illustrated in Figures 1 through 4.

### *Negative Halo Analyses*

In order to test for the presence of negative halo effects, a series of two-tailed paired samples *t*-tests were conducted, comparing symptom counts on non-target disruptive behavior dimensions to symptom counts on the non-target depression dimension. If a symptom count ratings non-target dimension were found to be significantly different from ratings on the non-target depression dimension, an independent samples *t*-test was conducted to test for sex or ethnicity differences in the magnitude of the halo effect.

For inattention, negative halo effects were expected for the ODD vignette, but not for the MDD vignette, when inattention was a non-target dimension (see Figure 1). Consistent with this expectation, *t*-tests showed that ratings of inattention were significantly higher for the ODD than for the MDD vignette ( $t(171) = 6.63, p = .001$ ). An

independent samples *t*-test did not reveal significant child sex, child ethnicity, or Child Sex  $\times$  Child Ethnicity differences on level of inattention for the ODD vignette.

For hyperactivity, negative halo effects were expected for the ADHD-PI and ODD vignettes, but not for the MDD vignette (see Figure 2). As expected, ratings of hyperactivity were significantly higher for the ADHD-PI than for the MDD vignette ( $t(171) = 11.99, p = .001$ ). Similarly, ratings of hyperactivity were significantly higher for the ODD than for the MDD vignette ( $t(171) = 14.91, p = .001$ ). Independent samples *t*-tests did not reveal any child sex, child ethnicity, or Child Sex  $\times$  Child Ethnicity differences on levels of hyperactivity for the ADHD-PI or ODD vignettes.

For oppositionality, negative halo effects were expected for the ADHD-PI and ADHD-CT vignettes, but not for the MDD vignette (see Figure 3). As expected, ratings of oppositionality were significantly higher for the ADHD-CT than for the MDD vignette ( $t(171) = 17.15, p = .001$ ). However, ratings of oppositionality were not significantly higher for the ADHD-PI than for the MDD vignette ( $t(171) = .44, p = .66$ ). An independent samples *t*-test did not reveal significant sex, ethnicity, or Sex  $\times$  Ethnicity differences on level of oppositionality for the ADHD-CT vignette.

## CHAPTER VI

### DISCUSSION

The current study had three main goals. The first goal was to investigate the possibility of rater biases in ratings of ADHD in Caucasian and Hispanic children. The second goal was to evaluate whether results of previous studies indicating negative halo effects would generalize to Hispanic children. The final goal was to examine possible Child Sex  $\times$  Child Ethnicity interactions in order to explore whether interactions would have an impact on raters' judgments of child behavior and to examine whether negative halo effects would be more pronounced in one group over all others.

With regard to the first goal, results revealed that Caucasian and Hispanic children were not rated differently on target and non-target dimensions depicted in the vignettes. Child ethnicity did not affect ratings of child behavior in the current study, nor did child sex. As in a previous study (Hartung et al., 2005) ratings also did not differ by sex on target and non-target dimensions. Furthermore, there were no significant Child Sex  $\times$  Child Ethnicity interactions for target and non-target dimensions. These preliminary results imply that rater biases, based on child sex, child ethnicity, or an interaction between child sex and child ethnicity, do not account for differential prevalence rates in ADHD. Although the rater bias hypothesis was not supported in the current study, this hypotheses still cannot be ruled out, as rater biases may be contributing to the differential prevalence rates found in previous studies (i.e., Andrews et al., 1997; Arnold et al., 2003; Dominguez de Ramirez, 2001; Nolan et al., 2001; Reid et al., 2001;



Schmitz & Velez, 2003; Temple, 2002; Weisz & McCarty, 1999). It has not yet been determined whether differential prevalence rates found in previous studies can be accounted for by rater biases or by actual differences in behavior among different cultural groups. Internal and external validity in the above-mentioned previous studies may need to be investigated before determining whether differential prevalence rates can be better accounted for by rater biases or by actual behavioral differences among different groups. In addition, due to limitations in the current study such as those described below, further research is necessary before ruling out the rater bias hypotheses.

If, however, future studies and investigation of previous studies reveal that differential prevalence rates in ADHD are not due to rater biases, further examination of differential prevalence rates are necessary. For example, if raters are not showing any biases, there remains the possibility that behavior rating scales used to screen for ADHD may not be valid across sexes or across different ethnic groups. This possibility is not unlikely, given that many of the measures currently used for diagnosing ADHD were normed largely on samples of Caucasian boys. This alternate hypothesis is of great importance, especially because behavior rating scales are currently the most widely accepted and utilized method for establishing a diagnosis of ADHD. If validity of these measures is not consistent for boys and girls and across different cultural groups, it may be beneficial to update current measures or create new measures based on normative standards including girls and other ethnic or cultural groups.

There is also the possibility that actual differences in behavior exist between sex and across culture. If future studies reveal that differential prevalence rates across ethnicity are due to actual behavioral differences, this information may be necessary in

updating future editions of the *DSM*. The *DSM-IV-TR* (APA, 2000) already provides differential prevalence rates for boys and girls, but at this point, does not provide differential prevalence rates across cultures and ethnicities. Therefore, future research exploring prevalence rates across different ethnic and cultural groups may be beneficial in updating reported prevalence rates in the *DSM-IV-TR*.

With regard to the second goal of this study, bi-directional negative halo effects were found for the ADHD-CT vignette and for the ODD vignette. Specifically, children in the ODD vignette were rated as also having hyperactive/impulsive symptoms, even though there were no symptoms consistent with hyperactivity/impulsivity described in the ODD vignette. Similarly, although no behaviors consistent with oppositionality were described in the ADHD-CT vignette, children in the ADHD-CT vignette were rated as having symptoms of oppositionality. This finding was consistent with Jackson and King (2004) and Hartung et al. (2005) in that the halo effects were bi-directional and held for boys and girls. In addition to replicating the previous findings of Jackson and King (2004) and Hartung et al. (2005) with regard to sex, the current study is the first to extend these findings to Hispanic children. Therefore, based on these findings, caution must be exercised when rating scales are used to make diagnoses of disruptive behavior disorders, such as ADHD and ODD, given that elevated ratings on one disorder may artificially inflate ratings of another disorder. Caution is necessary for assessments of girls as well as for boys, and for assessments of Hispanic children as well as Caucasian children.

Finally, with regard to the third goal, it was hypothesized that the negative halo effects would be more pronounced for Hispanic boys than for Caucasian boys and Hispanic girls. Contrary to expectations, there were no differential effects of negative

halo by child sex or child ethnicity, nor were there any Child Sex  $\times$  Child Ethnicity interactions. Thus, results did not support the hypothesis that negative halo effects would be magnified in Hispanic boys when compared with Caucasian boys and Hispanic girls.

Although results from the current study did not provide support for the rater bias hypothesis for explaining the differential prevalence rates of ADHD between Hispanic and Caucasian children, this hypothesis still must not be ruled out due to several limitations in the current study. For example, vignettes used in the study depicted relatively severe cases of each disorder. This may lead us to question the external validity of the current study, given that children in the real world may display symptoms levels that are more borderline with regard to clinical significance. Also, the symptoms described in each vignette may have been so severe that there was a decreased probability that sex or ethnicity differences would be identified. If the behaviors described in vignettes were less severe, but still significant, raters may have shown differences in their ratings across sex and ethnicity. Therefore, future studies in this area should include vignettes with lower levels of intensity of symptomatology. In addition, children depicted in each vignette displayed behaviors consistent with a “pure” disorder (i.e., ADHD-PI only, ADHD-CT only, ODD only, MDD only). These pure versions were developed in order to isolate halo effects in our methodology. However, it also limits external validity, given that many children actually display disorders that are comorbid (i.e., ADHD comorbid with ODD or MDD). Therefore, future studies in this area may also need to include vignettes featuring children with comorbid disorders.

Another limitation of the current study was that raters were college students, rather than parents and educators who may have more experience with children. A future

direction for research in this area could be to replicate the design used in the present study, and to include raters with more experience in child behavior, such as teachers or parents. Furthermore, since male raters were not included in the current study, the results cannot be generalized to behavior rating scales completed by fathers and male teachers.

External validity was the primary weakness of the current study. However, internal validity was among one of the several strengths of the current study. The current study was tightly controlled, using vignettes with behavioral dimensions that were consistent with actual emotional or behavioral disorders. Rating scales used in the current study featured items that are identical to the items on actual rating scales and interviews used in diagnosing emotional and behavioral disorders in clinical settings (i.e., CBCL [Achenbach & Edelbrock, 1983], Barkley 2000, DSM-IV-TR [APA, 2000]). Implementation practicality was also a strength of the current study. In addition, the design used in the current study can easily be replicated.

In summary, the current study did not support the rater bias hypothesis for explaining differential prevalence rates in ADHD by sex or ethnicity. However, the current study extends the evidence for bi-directional negative halo effects to Hispanic children. Nonetheless, additional research involving disruptive behavior disorder vignettes with somewhat lower levels of symptomatology, and possibly some comorbidity, need to be conducted prior to ruling out the presence of rater biases, based on sex or ethnicity, in evaluations of children. Inclusion of male raters and raters with more experience with child behavior must also be considered in future studies before rater biases can be ruled out. As a future direction, researchers may wish to consider the above-mentioned suggestions for addressing limitations of the current study.

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APPENDIX A  
TABLES

Table 1

Ratings of Children on Target Dimensions

	Girls				Boys				Main Effects				Interaction	
	Caucasian		Hispanic		Caucasian		Hispanic		Child Sex		Child Ethnicity		Sex × Ethnicity	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	$\eta^2$	<i>F</i>	$\eta^2$	<i>F</i>	$\eta^2$
Inattention (ADHD-PI)	6.33	1.94	6.67	1.30	6.56	1.88	6.51	1.61	.02	.00	.32	.00	.56	.00
Inattention (ADHD-CT)	4.52	2.13	5.60	2.00	4.95	1.75	4.60	1.89	.92	.01	1.52	.01	5.77	.03
Hyperactivity/impulsivity	6.00	2.54	7.07	1.42	6.50	2.06	6.23	2.89	.27	.00	1.54	.01	4.27	.03
Oppositionality	7.23	1.13	6.83	1.96	6.98	1.53	7.36	1.01	.38	.00	.00	.00	3.12	.02
Depression	6.98	1.85	7.56	1.28	7.70	1.21	6.93	2.52	.03	.00	.11	.00	6.00	.03

*Note:* All *F* values are non-significant.  
 $\eta^2$  indicates effect size.

APPENDIX B

FIGURES

Figure 1

Inattention Ratings Across Vignettes

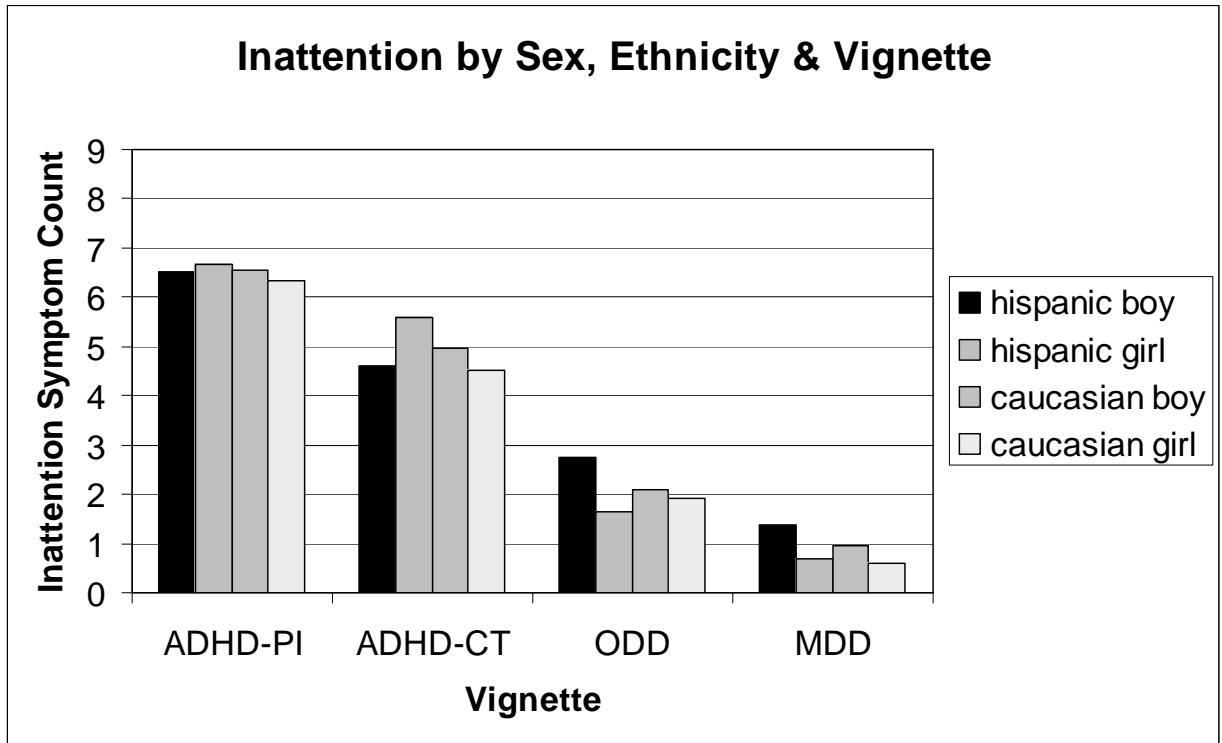


Figure 2

Hyperactivity/impulsivity Ratings Across Vignettes

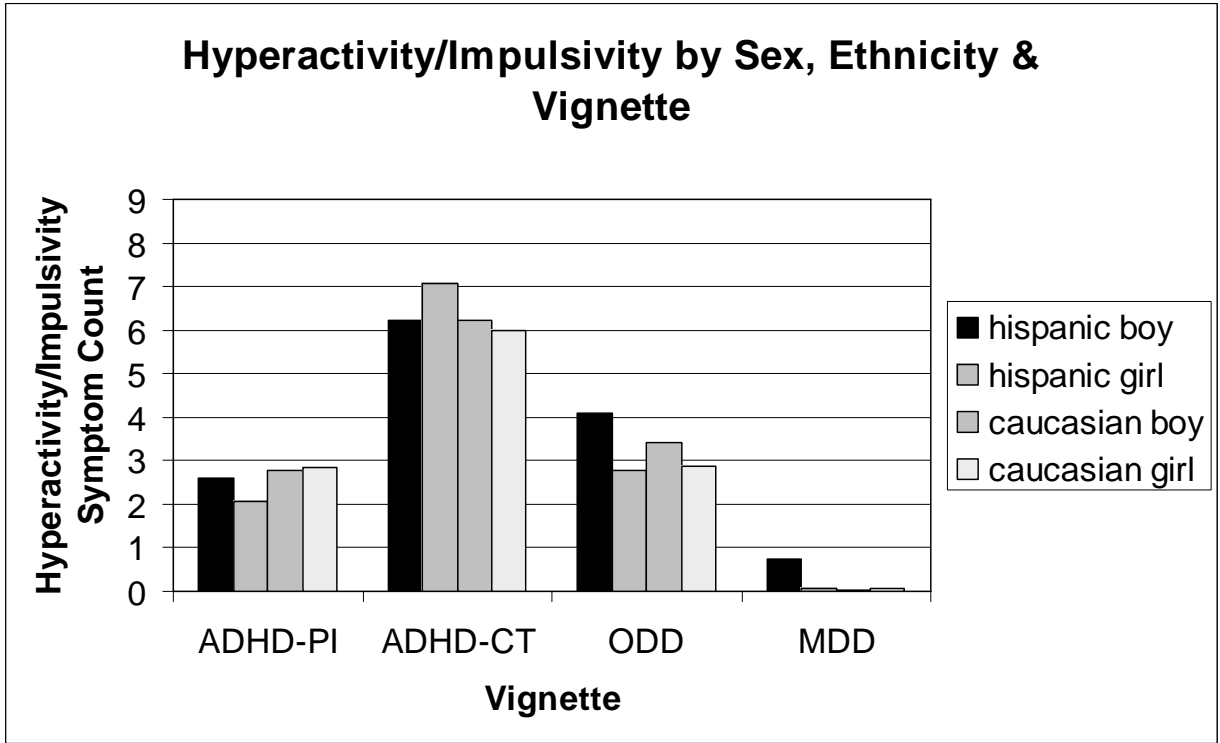


Figure 3

Oppositionality Ratings Across Vignettes

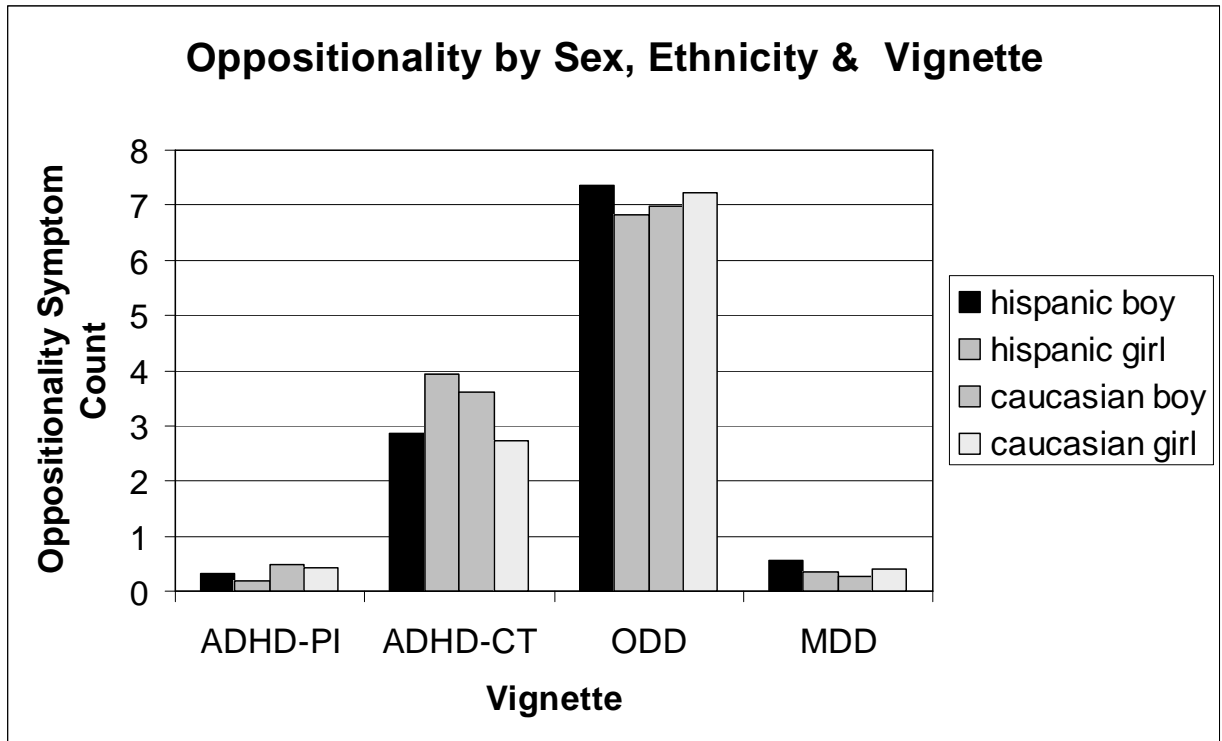
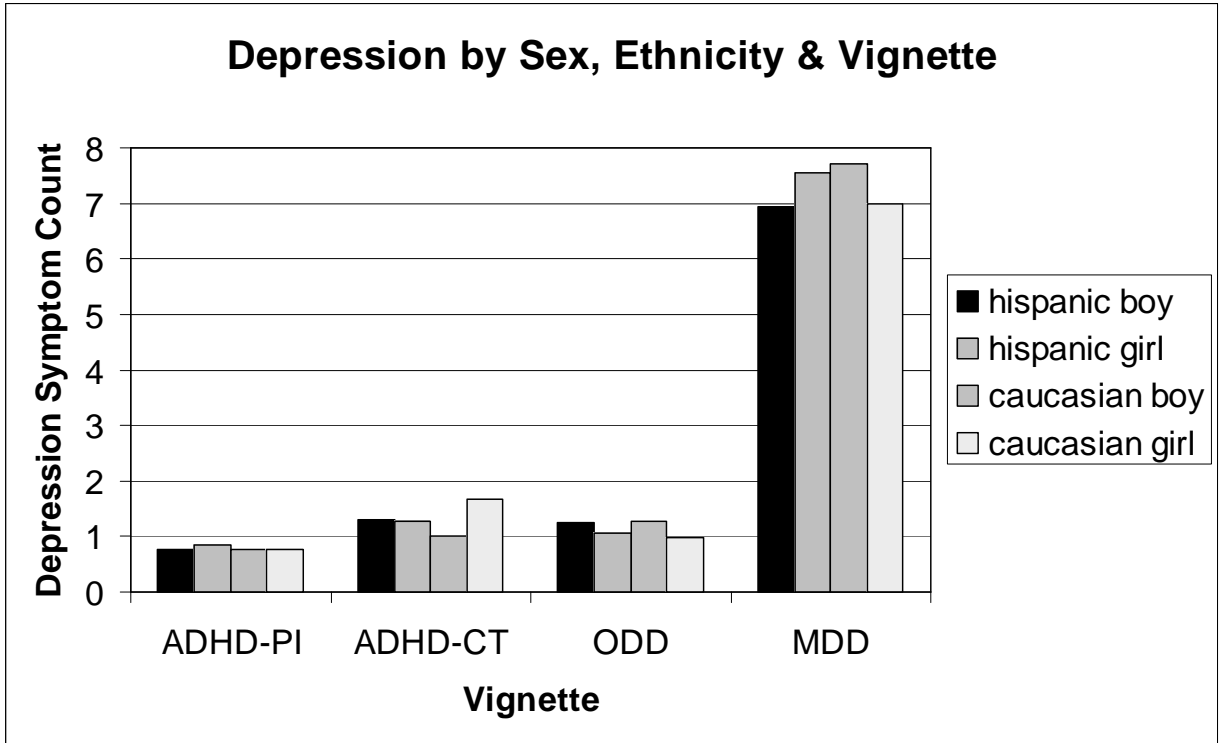


Figure 4

Depression Ratings Across Vignettes



APPENDIX C  
EXPERIMENTER SCRIPT



## Experimenter Script

### Setting up for participants

1. Make sure that the computer is turned on in order to play the audio files. Boot the computer if it is not already on. Open the audio vignettes folder so that you are ready to play the vignettes. (To get to the audio files: My Computer, G drive, Hartung Lab, Rater Bias Monica folder, Vignettes folder, Audio Vignettes folder) Make sure that the speakers are turned on.
2. Get out the list of subject numbers and determine which numbers are the next to be used. Pull out the files that correspond to these subject numbers.
3. Get out the “Record of Participants Assigned to Each Order” and determine which order is next to be used. Even if the previous order was not completely full, use the lowest numbered order for which all four participant columns are blank.
4. Get appropriate vignettes ready based on the “Order of Vignette Presentation” sheet
5. As participants arrive for the study, ask each one to sit at one of the designated spots within the room.
6. Assign the subject a number and write their subject number in the appropriate column on the “Record of Participants Assigned to Each Order.” Cross off each subject number that you use on the “Record of Subject Numbers” sheet.
7. You will be keeping control of all subject materials and passing each page to the participants as the study progresses. Thus, as each individual arrives, open his or her file folder and take out all of the forms. Make a pile of forms for each participant for you to access.
8. Once all participants have arrived, close the door and begin running the participant.

### Running Participants

#### **Step One: Gaining Informed Consent**

1. Take out the two copies of the consent form. Give each participant a copy and say, *“I am going to discuss the important details regarding this form and then I will give you a few moments to read it thoroughly yourself. The first paragraph indicates the name of this study and who is responsible for conducting the study. The second paragraph states that you will be asked to listen to several short descriptions of children’s behavior and then rate the child’s emotions and behavior in a paper-and-pencil format. You will also be asked to complete a few paper-and-pencil questionnaires about your current behavior, your behavior when you were a child, and the behavior of people that you knew when you were a child. The third paragraph states that a code number and not your name will appear on the information that you give us in order to protect your privacy. The fourth paragraph indicates that you will be given one hour of credit for research participation for completing this study. The fifth paragraph states that you understand that your participation is voluntary and that you may withdraw from participating at any time without any penalty. The final paragraph indicates who you may contact if you have questions or concerns about this study. Please read through this form carefully now and if you agree to participate, please sign and*

*date the back of the form. If you would rather not participate, you may be excused now.”*

2. Allow any participant who does not want to complete the study to leave. For all remaining participants, collect their signed consent form as they finish them. You should sign where it says “signature of project director or authorized representative.” Put the signed consent form in the participant’s file and give the participant a blank copy of the consent form to take with him or her.

### **Step Two: Vignettes**

1. The presentation order of the vignettes is based on the order number that you are using. Within the audio files folder on the computer, there is an audio file for each vignette. Consult the “Order of Vignette Presentation” sheet to determine when to play each vignette.
2. Select the audio file for the first vignette. Give each participant a printed copy of the corresponding vignette and say, *“You are going to hear someone read a description aloud to you. After you have heard the description, I will ask you to complete a rating of this child’s behavior and emotions. After you hear the first description and complete the rating scale you will be asked to listen to another description. You may follow along on this printed copy of the description. Please do not write on the printed copy.”*
3. Play the audio file. When the description is complete, give each participant the Rating Scale of Vignette 1 with their subject number and allow them to fill it out. Remind the participant that there is a front and a back to the form. Allow the participant to look at their copy of the vignette while they fill out the questionnaire. When they are finished, take up the rating scale and collect the printed copy of the vignette.
4. When all participants have completed the vignette rating scale, hand out the second vignette based on the order sheet. Play the audio file for the vignette that comes second in the order.
5. When the audio file is finished, pass out the Rating Scale of Vignette – 2 with their subject number. Take up the rating scale and vignette copy when the participant has finished.
6. When all participants have completed the vignette rating scale, hand out the third vignette. Play the audio file for the vignette that comes third in the order.
7. When the audio file is finished, pass out the Rating Scale of Vignette – 3 with their subject number. Take up rating scale and the vignette copy when the participant has finished.
8. When all participants have completed the vignette rating scale, hand out the fourth vignette. Play the audio file for the vignette that comes fourth in the order.
9. When the audio file is finished, pass out the Rating Scale of Vignette – 4 with their subject number. Take up rating scale and the vignette when the participant is finished.

### **Step Three: Questionnaires**

1. After the fourth vignette has been read, say to the participants, *“You have completed all of the information about the children that you heard about. We would now like you to complete a few questionnaires about yourself and people that you knew when you were a child. You may work at your own pace to*

*complete these questionnaires. Please read the directions at the top of each questionnaire. The questionnaires may look very similar, but they will ask you to respond in different ways. Please ask us if the directions are unclear to you. Please answer all questions without skipping any. If you do not know an answer, please provide your best guess. You do not have to provide an answer if you feel uncomfortable providing the answer to that question. When the questionnaires are complete, you may turn them into us and you will be given credit for your research participation.”*

2. Give each participant the demographic questionnaire, rating scale: self-report of current behavior, and rating scale: self-report of childhood with their subject number in the designated order.
3. Allow each participant to complete the questionnaires at his or her own pace. While they are doing that, you should put the vignette packets back into the correct order and put them back in the filing cabinet.
4. When the participant has completed all of their questionnaires, double check them to make sure he/she did not skip any questions or forget to complete any of the questionnaires. Remember, they are double sided, so you need to make sure that they answered all sides.
5. Make sure that all of the forms associated with that subject number are present and put them back in the folder that corresponds to the participant's subject number. Remove the participant's signed consent form from the stack of numbered forms and put the consent form in the signed consent form file in the filing cabinet. File the participant's folder with all of the numbered forms back in numerical order in the filing cabinet.

**Step Four: Assign Research Credit**

At the end of the session, go to <http://experimetrix2.com/okstate>. Click on the link that says Experimenter Area. Enter the logon and password. (Logon is 1 and the password is dz85670.) Go to “View Schedule” and click on “Past: Awaiting Credit or Penalty.” Assign 1 credit hour to each participant who participated in the study.

APPENDIX D  
CONSENT FORM

## Consent Form

I, \_\_\_\_\_, (name of participant), voluntarily consent to participate in the investigation of behavior ratings of descriptions of children's behavior, the purposes of which have been explained to me by Dr. Cynthia M. Hartung, Ph.D. or associates or assistants of her choosing. I thereby authorize Dr. Cynthia M. Hartung, Ph.D. or associates or assistants to perform the following procedures:

I understand that the research involves listening to several short descriptions of children's behavior and answering a series of questions about the vignettes in a paper-and-pencil format. In addition, I will be asked to complete several paper-and-pencil measures that inquire about my demographic information (e.g., gender, ethnicity, age), previous experience with children, experience with individuals who have behavior or emotional problems, and my own experience with behavior or emotional problems during childhood.

I understand that any data collected as part of my participation in this experiment will be treated as confidential and will receive a code number so that my responses will remain anonymous. In no case, will any use be made of these data other than as research results. If data from my participation are ever displayed, my identity will remain anonymous.

I understand that I will receive one research credit for one hour of participation. I understand that, although my participation may not be personally beneficial to me, the information derived from this project may have important implications for others. Specifically, the information gained may contribute to more accurate assessments of behavioral and emotional problems in children.

I understand that my participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty, after notifying the project director.

I may contact Dr. Cynthia M. Hartung, Psychology Department, 215 North Murray Hall, Oklahoma State University, at 405-744-7495 should I wish further information about the research. I may also contact Dr. Carol Olson, IRB Chair, 415 Whitehurst, Oklahoma State University, Stillwater, Oklahoma, 74078, 405-744-1676. Should any problems arise during the course of the study, I may take them to Dr. Maureen A. Sullivan, Psychology Department Head, 215 North Murray Hall, Oklahoma State University, at 405-744-6027.

**I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.**

---

**Signature of Participant**

---

**Date and Time**

**I certify that I have personally explained all elements of this form to the participant before requesting that he or she sign it.**

---

**Signature of Project Director**

---

**Date and Time**

APPENDIX E  
VIGNETTES

## **ADHD-IA Caucasian Male Vignette**

Samuel is a nine-year-old, Caucasian boy in the 4<sup>th</sup> grade in a classroom for children with learning difficulties. He was placed there when he began failing school, despite having above-average intelligence and no signs of a specific learning disorder. His greatest problems have always been inability to concentrate on his schoolwork and to apply persistent effort to boring but necessary tasks. He often is able to start an assignment, but his mind quickly wanders and leads to his being “off-task.” He can rarely complete his assignments without assistance, yet usually knows the answers or the correct steps to get the problem solved. What others provide for Samuel are some external structure, guidance, and discipline.

Samuel’s schoolwork is often poorly organized and his notebook is an organizational disaster. He often comes to school without something critical to the day such as pencils or his schoolbooks. When his many errors in his homework are pointed out to him, he can quickly say what is wrong with them. In class, he frequently raises his hand and then blurts out an answer, frequently the wrong answer. His teachers, nevertheless, enjoy his spontaneity and view him as a bit immature, scattered, and unfocused.

Samuel’s problems have existed since at least kindergarten and probably longer. Throughout his schooling, teachers have complained about his inattentive and impulsive style and his poor follow through on assignments. Yet, he has always had friends, has been well liked and included in other children’s activities, and has had no discipline problems. He has been tested three times by various psychologists and school learning specialists and found to be at the 75<sup>th</sup> percentile in intelligence and average or better in all academic skills. His handwriting is often noted to be poor and sluggish, however, and his fine motor coordination has been mildly delayed compared to other children’s.

At home, Samuel is generally polite and cooperative with his parents. However, he needs frequent reminders to complete daily activities and chores. Samuel’s parents have created a special study area at home where he does his homework. This area is away from the television, phone, and other potentially distracting items. Having Samuel complete his homework in this environment helps control his distractibility, but he still requires frequent prompting to stay on task.



## **ADHD-IA Hispanic Male Vignette**

Luis is a nine-year-old, Hispanic boy in the 4<sup>th</sup> grade in a classroom for children with learning difficulties. He was placed there when he began failing school, despite having above-average intelligence and no signs of a specific learning disorder. His greatest problems have always been inability to concentrate on his schoolwork and to apply persistent effort to boring but necessary tasks. He often is able to start an assignment, but his mind quickly wanders and leads to his being “off-task.” He can rarely complete his assignments without assistance, yet usually knows the answers or the correct steps to get the problem solved. What others provide for Luis are some external structure, guidance, and discipline.

Luis’s schoolwork is often poorly organized and his notebook is an organizational disaster. He often comes to school without something critical to the day such as pencils or his schoolbooks. When his many errors in his homework are pointed out to him, he can quickly say what is wrong with them. In class, he frequently raises his hand and then blurts out an answer, frequently the wrong answer. His teachers, nevertheless, enjoy his spontaneity and view him as a bit immature, scattered, and unfocused.

Luis’s problems have existed since at least kindergarten and probably longer. Throughout his schooling, teachers have complained about his inattentive and impulsive style and his poor follow through on assignments. Yet, he has always had friends, has been well liked and included in other children’s activities, and has had no discipline problems. He has been tested three times by various psychologists and school learning specialists and found to be at the 75<sup>th</sup> percentile in intelligence and average or better in all academic skills. His handwriting is often noted to be poor and sluggish, however, and his fine motor coordination has been mildly delayed compared to other children’s.

At home, Luis is generally polite and cooperative with his parents. However, he needs frequent reminders to complete daily activities and chores. Luis’s parents have created a special study area at home where he does his homework. This area is away from the television, phone, and other potentially distracting items. Having Luis complete his homework in this environment helps control his distractibility, but he still requires frequent prompting to stay on task.

## **ADHD-IA Caucasian Female Vignette**

Emily is a nine-year-old, Caucasian girl in the 4<sup>th</sup> grade in a classroom for children with learning difficulties. She was placed there when she began failing school, despite having above-average intelligence and no signs of a specific learning disorder. Her greatest problems have always been inability to concentrate on her schoolwork and to apply persistent effort to boring but necessary tasks. She often is able to start an assignment, but her mind quickly wanders and leads to her being “off-task.” She can rarely complete her assignments without assistance, yet usually knows the answers or the correct steps to get the problem solved. What others provide for Emily is some external structure, guidance, and discipline.

Emily’s schoolwork is often poorly organized and her notebook is an organizational disaster. She often comes to school without something critical to the day such as pencils or her schoolbooks. When her many errors in her homework are pointed out to her, she can quickly say what is wrong with them. In class, she frequently raises her hand and then blurts out an answer, frequently the wrong answer. Her teachers, nevertheless, enjoy her spontaneity and view her as a bit immature, scattered, and unfocused.

Emily’s problems have existed since at least kindergarten and probably longer. Throughout her schooling, teachers have complained about her inattentive and impulsive style and her poor follow through on assignments. Yet, she has always had friends, has been well liked and included in other children’s activities, and has had no discipline problems. She has been tested three times by various psychologists and school learning specialists and found to be at the 75<sup>th</sup> percentile in intelligence and average or better in all academic skills. Her handwriting is often noted to be poor and sluggish, however, and her fine motor coordination has been mildly delayed compared to other children’s.

At home, Emily is generally polite and cooperative with her parents. However, she needs frequent reminders to complete daily activities and chores. Emily’s parents have created a special study area at home where she does her homework. This area is away from the television, phone, and other potentially distracting items. Having Emily complete her homework in this environment helps control her distractibility, but she still requires frequent prompting to stay on task.

## **ADHD-IA Hispanic Female Vignette**

Luisa is a nine-year-old, Hispanic girl in the 4<sup>th</sup> grade in a classroom for children with learning difficulties. She was placed there when she began failing school, despite having above-average intelligence and no signs of a specific learning disorder. Her greatest problems have always been inability to concentrate on her schoolwork and to apply persistent effort to boring but necessary tasks. She often is able to start an assignment, but her mind quickly wanders and leads to her being “off-task.” She can rarely complete her assignments without assistance, yet usually knows the answers or the correct steps to get the problem solved. What others provide for Luisa is some external structure, guidance, and discipline.

Luisa’s schoolwork is often poorly organized and her notebook is an organizational disaster. She often comes to school without something critical to the day such as pencils or her schoolbooks. When her many errors in her homework are pointed out to her, she can quickly say what is wrong with them. In class, she frequently raises her hand and then blurts out an answer, frequently the wrong answer. Her teachers, nevertheless, enjoy her spontaneity and view her as a bit immature, scattered, and unfocused.

Luisa’s problems have existed since at least kindergarten and probably longer. Throughout her schooling, teachers have complained about her inattentive and impulsive style and her poor follow through on assignments. Yet, she has always had friends, has been well liked and included in other children’s activities, and has had no discipline problems. She has been tested three times by various psychologists and school learning specialists and found to be at the 75<sup>th</sup> percentile in intelligence and average or better in all academic skills. Her handwriting is often noted to be poor and sluggish, however, and her fine motor coordination has been mildly delayed compared to other children’s.

At home, Luisa is generally polite and cooperative with her parents. However, she needs frequent reminders to complete daily activities and chores. Luisa’s parents have created a special study area at home where she does her homework. This area is away from the television, phone, and other potentially distracting items. Having Luisa complete her homework in this environment helps control her distractibility, but she still requires frequent prompting to stay on task.

## **ADHC-CT Caucasian Male Vignette**

Carter, a seven-year-old, Caucasian boy, began having problems in kindergarten. His teacher frequently sent notes home about discipline problems. Everyone hoped that Carter would mature and do much better in first grade, but his behavior became even more disruptive during the first grade. Carter's mother stated that she had received negative reports about him several times over the first two months of school. Carter's teacher complained about his failure to get work done and classroom disruption.

Carter's parents described him as a difficult infant. As Carter grew, his mother reported even more difficulties with him. He was into everything and always "on the go." Verbal reprimands seemed to have no effect on him. When either parent tried to stop him from doing something (e.g. playing with an expensive vase, turning the stove off and on), he would often have a temper tantrum.

A similar pattern emerged with the neighborhood children. Many of the parents no longer allowed their children to play with Carter because he was too active and destructive. During this period, Carter's parents also reported that he had low frustration tolerance and a short attention span. For example, Carter could not stay with puzzles and games more than a few minutes and often reacted angrily when his brief efforts did not produce success. Going out for dinner had become impossible because of Carter's misbehavior in restaurants. Even mealtimes at home had become unpleasant because Carter could not sit still and his fidgeting often caused food to be spilled.

Carter's behavior in the classroom was difficult to control. During one morning, Carter was out of his seat inappropriately six times. On one occasion, he jumped up to look out the window when a noise, probably a car backfiring was heard. He went to talk to other children three times. Twice he got up and just began quickly walking around the classroom. Even when he stayed seated, he was often not working and instead was fidgeting or bothering other children. Any noise, even another child coughing or dropping a pencil, distracted him from his work. When his teacher spoke to him, he did not seem to hear; it was not until the teacher had begun yelling at him that he paid any attention.

## **ADHC-CT Hispanic Male Vignette**

Carlos, a seven-year-old, Hispanic boy, began having problems in kindergarten. His teacher frequently sent notes home about discipline problems. Everyone hoped that Carlos would mature and do much better in first grade, but his behavior became even more disruptive during the first grade. Carlos's mother stated that she had received negative reports about him several times over the first two months of school. Carlos's teacher complained about his failure to get work done and classroom disruption.

Carlos's parents described him as a difficult infant. As Carlos grew, his mother reported even more difficulties with him. He was into everything and always "on the go." Verbal reprimands seemed to have no effect on him. When either parent tried to stop him from doing something (e.g. playing with an expensive vase, turning the stove off and on), he would often have a temper tantrum.

A similar pattern emerged with the neighborhood children. Many of the parents no longer allowed their children to play with Carlos because he was too active and destructive. During this period, Carlos's parents also reported that he had low frustration tolerance and a short attention span. For example, Carlos could not stay with puzzles and games more than a few minutes and often reacted angrily when his brief efforts did not produce success. Going out for dinner had become impossible because of Carlos's misbehavior in restaurants. Even mealtimes at home had become unpleasant because Carlos could not sit still and his fidgeting often caused food to be spilled.

Carlos's behavior in the classroom was difficult to control. During one morning, Carlos was out of his seat inappropriately six times. On one occasion, he jumped up to look out the window when a noise, probably a car backfiring was heard. He went to talk to other children three times. Twice he got up and just began quickly walking around the classroom. Even when he stayed seated, he was often not working and instead was fidgeting or bothering other children. Any noise, even another child coughing or dropping a pencil, distracted him from his work. When his teacher spoke to him, he did not seem to hear; it was not until the teacher had begun yelling at him that he paid any attention.

## **ADHC-CT Caucasian Female Vignette**

Hannah, a seven-year-old, Caucasian girl, began having problems in kindergarten. Her teacher frequently sent notes home about discipline problems. Everyone hoped that Hannah would mature and do much better in first grade, but her behavior became even more disruptive during the first grade. Hannah's mother stated that she had received negative reports about her several times over the first two months of school. Hannah's teacher complained about her failure to get work done and classroom disruption.

Hannah's parents described her as a difficult infant. As Hannah grew, her mother reported even more difficulties with her. She was into everything and always "on the go." Verbal reprimands seemed to have no effect on her. When either parent tried to stop her from doing something (e.g. playing with an expensive vase, turning the stove off and on), she would often have a temper tantrum.

A similar pattern emerged with the neighborhood children. Many of the parents no longer allowed their children to play with Hannah because she was too active and destructive. During this period, Hannah's parents also reported that she had low frustration tolerance and a short attention span. For example, Hannah could not stay with puzzles and games more than a few minutes and often reacted angrily when her brief efforts did not produce success. Going out for dinner had become impossible because of Hannah's misbehavior in restaurants. Even mealtimes at home had become unpleasant because Hannah could not sit still and her fidgeting often caused food to be spilled.

Hannah's behavior in the classroom was difficult to control. During one morning, Hannah was out of her seat inappropriately six times. On one occasion, she jumped up to look out the window when a noise, probably a car backfiring was heard. She went to talk to other children three times. Twice she got up and just began quickly walking around the classroom. Even when she stayed seated, she was often not working and instead was fidgeting or bothering other children. Any noise, even another child coughing or dropping a pencil, distracted her from her work. When her teacher spoke to her, she did not seem to hear; it was not until the teacher had begun yelling at her that she paid any attention.

## **ADHC-CT Hispanic Female Vignette**

Rósa, a seven-year-old, Hispanic girl, began having problems in kindergarten. Her teacher frequently sent notes home about discipline problems. Everyone hoped that Rósa would mature and do much better in first grade, but her behavior became even more disruptive during the first grade. Rósa's mother stated that she had received negative reports about her several times over the first two months of school. Rósa's teacher complained about her failure to get work done and classroom disruption.

Rósa's parents described her as a difficult infant. As Rósa grew, her mother reported even more difficulties with her. She was into everything and always "on the go." Verbal reprimands seemed to have no effect on her. When either parent tried to stop her from doing something (e.g. playing with an expensive vase, turning the stove off and on), she would often have a temper tantrum.

A similar pattern emerged with the neighborhood children. Many of the parents no longer allowed their children to play with Rósa because she was too active and destructive. During this period, Rósa's parents also reported that she had low frustration tolerance and a short attention span. For example, Rósa could not stay with puzzles and games more than a few minutes and often reacted angrily when her brief efforts did not produce success. Going out for dinner had become impossible because of Rósa's misbehavior in restaurants. Even mealtimes at home had become unpleasant because Rósa could not sit still and her fidgeting often caused food to be spilled.

Rósa's behavior in the classroom was difficult to control. During one morning, Rósa was out of her seat inappropriately six times. On one occasion, she jumped up to look out the window when a noise, probably a car backfiring was heard. She went to talk to other children three times. Twice she got up and just began quickly walking around the classroom. Even when she stayed seated, she was often not working and instead was fidgeting or bothering other children. Any noise, even another child coughing or dropping a pencil, distracted her from her work. When her teacher spoke to her, she did not seem to hear; it was not until the teacher had begun yelling at her that she paid any attention.

## **ODD Caucasian Male Vignette**

John, a six-year old, Caucasian boy, had been “extremely difficult” for at least the past three years. John’s parents stated that the child was “ruining their marriage.” The father felt that the mother spoiled the boy with inconsistent discipline, and the mother claimed she tried her best without success. He was willful and the “terrible twos” were never outgrown. John often spoiled family activities by misbehaving and attempts to have playmates over often ended in a tantrum with the friends sent home. The teachers at the school he attended often had him play quietly by himself because he irritated the other children. For example, John often stole their toys and then teased the other children about having been able to take the toy. When the other children responded to his provocations, he often ended up throwing things or slapping someone. If a teacher attempted to discipline John, John blamed the other children for causing him to misbehave. John was extremely reluctant to accept responsibility for his behavior. Developmental milestones had been normal, although John lisped and talked baby talk, which had somewhat improved in the past year. He was considered to be quite bright by his teachers.

When John went to visit other family members, he usually enjoyed the individual attention shown him but often was very demanding and refused to do what was asked of him. He tried to keep toys that belong to his cousins even though he was told that he couldn’t. He usually refused to help put toys away when it was time to go home, saying he didn’t feel like it. He often had angry out-bursts at his cousins, which were usually caused by minor, insignificant annoyances.

John argued with almost everything his parents said to him or asked him to do. He refused to help with even the simplest of household chores. Getting him ready for school or for bed was often a battle, because John refused to comply with his parents’ requests. If his parents’ punished him for his misbehavior, he often attempted to “get even” with them by hiding their possessions or breaking something of theirs.

Both parents were invested in the child but found his violent temper tantrums hard to handle and his insistent demands frustrating; the parents were at a loss on how to control John’s behaviors.



## **ODD Hispanic Male Vignette**

Juan, a six-year old, Hispanic boy, had been “extremely difficult” for at least the past three years. Juan’s parents stated that the child was “ruining their marriage.” The father felt that the mother spoiled the boy with inconsistent discipline, and the mother claimed she tried her best without success. He was willful and the “terrible twos” were never outgrown. Juan often spoiled family activities by misbehaving and attempts to have playmates over often ended in a tantrum with the friends sent home. The teachers at the school he attended often had him play quietly by himself because he irritated the other children. For example, Juan often stole their toys and then teased the other children about having been able to take the toy. When the other children responded to his provocations, he often ended up throwing things or slapping someone. If a teacher attempted to discipline Juan, Juan blamed the other children for causing him to misbehave. Juan was extremely reluctant to accept responsibility for his behavior. Developmental milestones had been normal, although Juan lisped and talked baby talk, which had somewhat improved in the past year. He was considered to be quite bright by his teachers.

When Juan went to visit other family members, he usually enjoyed the individual attention shown him but often was very demanding and refused to do what was asked of him. He tried to keep toys that belong to his cousins even though he was told that he couldn’t. He usually refused to help put toys away when it was time to go home, saying he didn’t feel like it. He often had angry out-bursts at his cousins, which were usually caused by minor, insignificant annoyances.

Juan argued with almost everything his parents said to him or asked him to do. He refused to help with even the simplest of household chores. Getting him ready for school or for bed was often a battle, because Juan refused to comply with his parents’ requests. If his parents’ punished him for his misbehavior, he often attempted to “get even” with them by hiding their possessions or breaking something of theirs.

Both parents were invested in the child but found his violent temper tantrums hard to handle and his insistent demands frustrating; the parents were at a loss on how to control Juan’s behaviors.

### **ODD Caucasian Female Vignette**

Alyssa, a six-year old, Caucasian girl, had been “extremely difficult” for at least the past three years. Alyssa’s parents stated that the child was “ruining their marriage.” The father felt that the mother spoiled the girl with inconsistent discipline, and the mother claimed she tried her best without success. She was willful and the “terrible twos” were never outgrown. Alyssa often spoiled family activities by misbehaving and attempts to have playmates over often ended in a tantrum with the friends sent home. The teachers at the school she attended often had her play quietly by herself because she irritated the other children. For example, Alyssa often stole their toys and then teased the other children about having been able to take the toy. When the other children responded to her provocations, she often ended up throwing things or slapping someone. If a teacher attempted to discipline Alyssa, Alyssa blamed the other children for causing her to misbehave. Alyssa was extremely reluctant to accept responsibility for her behavior. Developmental milestones had been normal, although Alyssa lisped and talked baby talk, which had somewhat improved in the past year. She was considered to be quite bright by her teachers.

When Alyssa went to visit other family members, she usually enjoyed the individual attention shown her but often was very demanding and refused to do what was asked of her. She tried to keep toys that belong to her cousins even though she was told that she couldn’t. She usually refused to help put toys away when it was time to go home, saying she didn’t feel like it. She often had angry out-bursts at her cousins, which were usually caused by minor, insignificant annoyances.

Alyssa argued with almost everything her parents said to her or asked her to do. She refused to help with even the simplest of household chores. Getting her ready for school or for bed was often a battle, because Alyssa refused to comply with her parents’ requests. If her parents’ punished her for her misbehavior, she often attempted to “get even” with them by hiding their possessions or breaking something of theirs.

Both parents were invested in the child but found her violent temper tantrums hard to handle and her insistent demands frustrating; the parents were at a loss on how to control Alyssa’s behaviors.

## **ODD Hispanic Female Vignette**

Juanita, a six-year old, Hispanic girl, had been “extremely difficult” for at least the past three years. Juanita’s parents stated that the child was “ruining their marriage.” The father felt that the mother spoiled the girl with inconsistent discipline, and the mother claimed she tried her best without success. She was willful and the “terrible twos” were never outgrown. Juanita often spoiled family activities by misbehaving and attempts to have playmates over often ended in a tantrum with the friends sent home. The teachers at the school she attended often had her play quietly by herself because she irritated the other children. For example, Juanita often stole their toys and then teased the other children about having been able to take the toy. When the other children responded to her provocations, she often ended up throwing things or slapping someone. If a teacher attempted to discipline Juanita, Juanita blamed the other children for causing her to misbehave. Juanita was extremely reluctant to accept responsibility for her behavior. Developmental milestones had been normal, although Juanita lisped and talked baby talk, which had somewhat improved in the past year. She was considered to be quite bright by her teachers.

When Juanita went to visit other family members, she usually enjoyed the individual attention shown her but often was very demanding and refused to do what was asked of her. She tried to keep toys that belong to her cousins even though she was told that she couldn’t. She usually refused to help put toys away when it was time to go home, saying she didn’t feel like it. She often had angry out-bursts at her cousins, which were usually caused by minor, insignificant annoyances.

Juanita argued with almost everything her parents said to her or asked her to do. She refused to help with even the simplest of household chores. Getting her ready for school or for bed was often a battle, because Juanita refused to comply with her parents’ requests. If her parents’ punished her for her misbehavior, she often attempted to “get even” with them by hiding their possessions or breaking something of theirs.

Both parents were invested in the child but found her violent temper tantrums hard to handle and her insistent demands frustrating; the parents were at a loss on how to control Juanita’s behaviors.

## **MDD Caucasian Male Vignette**

For the past 3 months, Eric, a nine-year-old, Caucasian boy, had expressed fearfulness about attending his after school extracurricular activities. In spite of excellent functioning in his studies, he became upset at the prospect of spending 3 hours at these activities. He reported a mixture of worries about failure and complained of stomachaches and headaches. Primarily, he felt sad, and recently had been unable to enjoy his usual school activities. Eric also seemed to be less interested in playing soccer on the town's recreational team and going to his karate classes, both activities that he used to enjoy quite a bit. Going to sleep became troublesome too, because he was worried about doing poorly in school and he frequently awakened several times during the night. At the same time, his school performance had begun to decline, from all A's to mostly B grades, because of missing school and difficulty concentrating. He had become very sad and on several occasions burst into tears for no apparent reason.

Although shy, Eric was a likable child and had always been a good student. In the past, he attended summer camp, and, though he was somewhat homesick, he seemed to enjoy the activities. He stayed overnight several times with friends who lived nearby but did appear to be somewhat tied to his mother. Eric used to talk with his mother at length about his day, but he seemed more withdrawn and irritable lately. Eric used to play outside with his neighborhood friends often, but he started spending his afternoons lying on the couch because he felt tired and worn out after school.

Due to concerns about his physical complaints and fatigue, Eric's parents took him to his pediatrician. The pediatrician was unable to find any physical explanations for Eric's symptoms. Eric's parents denied that Eric had experienced any traumatic events during the past six-months including deaths in the family, marital problems, or abuse that might explain why he was feeling so sad. While talking to the doctor, Eric suddenly began to sob that he felt terrible all the time and several times said that he would be better off dead, although he denied any specific suicidal plan. He said he felt guilty that he was such a worry to his parents and that he felt worthless.

## **MDD Hispanic Male Vignette**

For the past 3 months, Migúel, a nine-year-old, Hispanic boy, had expressed fearfulness about attending his after school extracurricular activities. In spite of excellent functioning in his studies, he became upset at the prospect of spending 3 hours at these activities. He reported a mixture of worries about failure and complained of stomachaches and headaches. Primarily, he felt sad, and recently had been unable to enjoy his usual school activities. Migúel also seemed to be less interested in playing soccer on the town's recreational team and going to his karate classes, both activities that he used to enjoy quite a bit. Going to sleep became troublesome too, because he was worried about doing poorly in school and he frequently awakened several times during the night. At the same time, his school performance had begun to decline, from all A's to mostly B grades, because of missing school and difficulty concentrating. He had become very sad and on several occasions burst into tears for no apparent reason.

Although shy, Migúel was a likable child and had always been a good student. In the past, he attended summer camp, and, though he was somewhat homesick, he seemed to enjoy the activities. He stayed overnight several times with friends who lived nearby but did appear to be somewhat tied to his mother. Migúel used to talk with his mother at length about his day, but he seemed more withdrawn and irritable lately. Migúel used to play outside with his neighborhood friends often, but he started spending his afternoons lying on the couch because he felt tired and worn out after school.

Due to concerns about his physical complaints and fatigue, Migúel's parents took him to his pediatrician. The pediatrician was unable to find any physical explanations for Migúel's symptoms. Migúel's parents denied that Migúel had experienced any traumatic events during the past six-months including deaths in the family, marital problems, or abuse that might explain why he was feeling so sad. While talking to the doctor, Migúel suddenly began to sob that he felt terrible all the time and several times said that he would be better off dead, although he denied any specific suicidal plan. He said he felt guilty that he was such a worry to his parents and that he felt worthless.

## **MDD Caucasian Female Vignette**

For the past 3 months, Erica, a 9-year-old, Caucasian girl, had expressed fearfulness about attending her after school extracurricular activities. In spite of excellent functioning in her studies, she became upset at the prospect of spending 3 hours at these activities. She reported a mixture of worries about failure and complained of stomachaches and headaches. Primarily, she felt sad, and recently had been unable to enjoy her usual school activities. Erica also seemed to be less interested in playing soccer on the town's recreational team and going to her karate classes, both activities that she used to enjoy quite a bit. Going to sleep became troublesome too, because she was worried about doing poorly in school and she frequently awakened several times during the night. At the same time, her school performance had begun to decline, from all A's to mostly B grades, because of missing school and difficulty concentrating. She had become very sad and on several occasions burst into tears for no apparent reason.

Although shy, Erica was a likable child and had always been a good student. In the past, she attended summer camp, and, though she was somewhat homesick, she seemed to enjoy the activities. She stayed overnight several times with friends who lived nearby but did appear to be somewhat tied to her mother. Erica used to talk with her mother at length about her day, but she seemed more withdrawn and irritable lately. Erica used to play outside with her neighborhood friends often, but she started spending her afternoons lying on the couch because she felt tired and worn out after school.

Due to concerns about her physical complaints and fatigue, Erica's parents took her to her pediatrician. The pediatrician was unable to find any physical explanations for Erica's symptoms. Erica's parents denied that Erica had experienced any traumatic events during the past six-months including deaths in the family, marital problems, or abuse that might explain why she was feeling so sad. While talking to the doctor, Erica suddenly began to sob that she felt terrible all the time and several times said that she would be better off dead, although she denied any specific suicidal plan. She said she felt guilty that she was such a worry to her parents and that she felt worthless.

## **MDD Hispanic Female Vignette**

For the past 3 months, María, a 9-year-old, Hispanic girl, had expressed fearfulness about attending her after school extracurricular activities. In spite of excellent functioning in her studies, she became upset at the prospect of spending 3 hours at these activities. She reported a mixture of worries about failure and complained of stomachaches and headaches. Primarily, she felt sad, and recently had been unable to enjoy her usual school activities. María also seemed to be less interested in playing soccer on the town's recreational team and going to her karate classes, both activities that she used to enjoy quite a bit. Going to sleep became troublesome too, because she was worried about doing poorly in school and she frequently awakened several times during the night. At the same time, her school performance had begun to decline, from all A's to mostly B grades, because of missing school and difficulty concentrating. She had become very sad and on several occasions burst into tears for no apparent reason.

Although shy, María was a likable child and had always been a good student. In the past, she attended summer camp, and, though she was somewhat homesick, she seemed to enjoy the activities. She stayed overnight several times with friends who lived nearby but did appear to be somewhat tied to her mother. María used to talk with her mother at length about her day, but she seemed more withdrawn and irritable lately. María used to play outside with her neighborhood friends often, but she started spending her afternoons lying on the couch because she felt tired and worn out after school.

Due to concerns about her physical complaints and fatigue, María's parents took her to her pediatrician. The pediatrician was unable to find any physical explanations for María's symptoms. María's parents denied that María had experienced any traumatic events during the past six-months including deaths in the family, marital problems, or abuse that might explain why she was feeling so sad. While talking to the doctor, María suddenly began to sob that she felt terrible all the time and several times said that she would be better off dead, although she denied any specific suicidal plan. She said she felt guilty that she was such a worry to her parents and that she felt worthless.

APPENDIX F  
MEASURES



## Demographic Questionnaire

*Please fill in the blanks below. All responses will be kept confidential.*

1. Your sex (check one):  Male  Female

2. Your age: \_\_\_\_\_

3. Your ethnicity:

<input type="checkbox"/> Caucasian	<input type="checkbox"/> American Indian	_____
		Tribe or Nation
<input type="checkbox"/> African-American	<input type="checkbox"/> Biracial	_____
		Please describe
<input type="checkbox"/> Hispanic/Latino	<input type="checkbox"/> Other	_____
		Please describe
<input type="checkbox"/> Asian/Asian-American		

4. Your highest level of education completed (circle one):

1    2    3    4    5    6    7    8 (Grade school)  
9    10    11    12 (High school)  
13    14    15    16 (College)  
17 and over (Graduate School)

5. Your living situation (check one):

Dorm, house, apartment only while school is in session  
 Parents' or other relatives home  
 Maintain own residence year-round

6. Number of people living in your current residence \_\_\_\_\_

7. Relationship to you of other occupants in your current residence (check all that apply)

Parents                       Other relatives  
 Siblings                       Roommates (not biologically related)

8. Your occupation \_\_\_\_\_

9. Have you ever held a job or volunteer position that required you to work with children?

No  Yes (If yes, please describe position and ages of children involved)

\_\_\_\_\_  
\_\_\_\_\_

10. Your total household income per month (check one):

Less than \$800 \_\_\_\_\_ \$800-\$1,000 \_\_\_\_\_ \$1001-\$1,500 \_\_\_\_\_  
\$1,501-\$2,000 \_\_\_\_\_ \$2,001-\$2,500 \_\_\_\_\_ over \$2,500 \_\_\_\_\_

11. Marital Status (check one):

Married \_\_\_\_\_ Divorced \_\_\_\_\_ Separated \_\_\_\_\_ Single \_\_\_\_\_  
Widowed \_\_\_\_\_ Living with partner \_\_\_\_\_

12. Do you have siblings?

\_\_\_\_\_ No \_\_\_\_\_ Yes

Age (in years)	Sex (please circle)
_____	M F
_____	M F
_____	M F
_____	M F
_____	M F

13. What types of classes did you attend in school (check all that apply)?

ELEMENTARY	JR. HIGH	HIGH SCHOOL
_____regular	_____regular	_____regular
_____learning disability	_____learning disability	_____learning disability
_____emotionally disturbed	_____emotionally disturbed	_____emotionally
disturbed		
_____Other	_____Other	_____Other

(If Other, please explain) \_\_\_\_\_

14. Did you ever skip a grade? \_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, when and how many years? \_\_\_\_\_

15. Repeat a grade? \_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, when and how many years? \_\_\_\_\_

16. Did you ever have a tutor or other special help with schoolwork? \_\_\_\_\_ Yes \_\_\_\_\_ No

17. Were you ever been suspended or expelled? \_\_\_\_\_ Yes \_\_\_\_\_ No

18. Did you ever receive individual or group therapy as a child? \_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, what was the primary reason for receiving therapy? \_\_\_\_\_

19. Are you currently receiving therapy or any mental health services? \_\_\_\_ Yes \_\_\_\_ No

If yes, what is the primary reason for receiving therapy? \_\_\_\_\_

20. Were any of these characteristic of you as a child (check all that apply)?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Very unhappy            | <input type="checkbox"/> Overactive           | <input type="checkbox"/> Fire setting         |
| <input type="checkbox"/> Irritable               | <input type="checkbox"/> Impulsive            | <input type="checkbox"/> Stealing             |
| <input type="checkbox"/> Temper outbursts        | <input type="checkbox"/> Stubborn             | <input type="checkbox"/> Lying                |
| <input type="checkbox"/> Withdrawn               | <input type="checkbox"/> Disobedient          | <input type="checkbox"/> Mean to others       |
| <input type="checkbox"/> Poor school performance | <input type="checkbox"/> Daydreaming          | <input type="checkbox"/> Destructive          |
| <input type="checkbox"/> Truancy                 | <input type="checkbox"/> Fearful              | <input type="checkbox"/> Trouble with the law |
| <input type="checkbox"/> Running away            | <input type="checkbox"/> Clumsy               | <input type="checkbox"/> Self-mutilating      |
| <input type="checkbox"/> Eating problems         | <input type="checkbox"/> Slow                 | <input type="checkbox"/> Head banging         |
| <input type="checkbox"/> Sleeping problems       | <input type="checkbox"/> Short attention span | <input type="checkbox"/> Rocking              |
| <input type="checkbox"/> Sickly                  | <input type="checkbox"/> Distractible         | <input type="checkbox"/> Shy                  |
| <input type="checkbox"/> Undependable            | <input type="checkbox"/> Lacks initiative     | <input type="checkbox"/> Peer conflict        |
| <input type="checkbox"/> Strange thoughts        | <input type="checkbox"/> Strange behavior     | <input type="checkbox"/> Phobic               |
| <input type="checkbox"/> Bed wetting             | <input type="checkbox"/> Suicidal             |   |

21. Have you ever had any of the following problems (check all that apply)?

- |   |  |
|---|--|
| Problems with aggressiveness, defiance, and oppositional behavior | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Problems with attention, activity, and impulse control            | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Learning disabilities   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Psychosis or schizophrenia  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Depression for more than 2 weeks                                  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Anxiety that impaired adjustment                                  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Tics or Tourette's  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Alcohol abuse   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Substance abuse   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Antisocial behavior (assaults, thefts, etc.)                      | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Arrests   | <input type="checkbox"/> Yes <input type="checkbox"/> No |

22. Have your parents or siblings ever had any of the following problems (check all that apply)?

- |   |  |
|---|--|
| Problems with aggressiveness, defiance, and oppositional behavior | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Problems with attention, activity, and impulse control            | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Learning disabilities   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Psychosis or schizophrenia  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Depression for more than 2 weeks                                  | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Anxiety that impaired adjustment	<input type="checkbox"/> Yes <input type="checkbox"/> No
Tics or Tourette's	<input type="checkbox"/> Yes <input type="checkbox"/> No
Alcohol abuse	<input type="checkbox"/> Yes <input type="checkbox"/> No
Substance abuse	<input type="checkbox"/> Yes <input type="checkbox"/> No
Antisocial behavior (assaults, thefts, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Arrests	<input type="checkbox"/> Yes <input type="checkbox"/> No

**IF YOU HAVE CHILDREN, PLEASE COMPLETE THE NEXT PAGE**

23. Please complete the following information about your children.

Age (in years)	Sex (please circle)	
_____	M	F
_____	M	F
_____	M	F
_____	M	F
_____	M	F

24. Are any of these characteristic of your child(ren) (check all that apply)?

<input type="checkbox"/> Very unhappy	<input type="checkbox"/> Overactive	<input type="checkbox"/> Fire setting
<input type="checkbox"/> Irritable	<input type="checkbox"/> Impulsive	<input type="checkbox"/> Stealing
<input type="checkbox"/> Temper outbursts	<input type="checkbox"/> Stubborn	<input type="checkbox"/> Lying
<input type="checkbox"/> Withdrawn	<input type="checkbox"/> Disobedient	<input type="checkbox"/> Mean to others
<input type="checkbox"/> Poor school performance	<input type="checkbox"/> Daydreaming	<input type="checkbox"/> Destructive
<input type="checkbox"/> Truancy	<input type="checkbox"/> Fearful	<input type="checkbox"/> Trouble with the law
<input type="checkbox"/> Running away	<input type="checkbox"/> Clumsy	<input type="checkbox"/> Self-mutilating
<input type="checkbox"/> Eating problems	<input type="checkbox"/> Slow	<input type="checkbox"/> Head banging
<input type="checkbox"/> Sleeping problems	<input type="checkbox"/> Short attention span	<input type="checkbox"/> Rocking
<input type="checkbox"/> Sickly	<input type="checkbox"/> Distractible	<input type="checkbox"/> Shy
<input type="checkbox"/> Undependable	<input type="checkbox"/> Lacks initiative	<input type="checkbox"/> Peer conflict
<input type="checkbox"/> Strange thoughts	<input type="checkbox"/> Strange behavior	<input type="checkbox"/> Phobic
<input type="checkbox"/> Bed wetting	<input type="checkbox"/> Suicidal	

25. Has your child(ren) ever had any of the following problems (check all that apply)?

Problems with aggressiveness, defiance, and oppositional behavior	<input type="checkbox"/> Yes <input type="checkbox"/> No
Problems with attention, activity, and impulse control	<input type="checkbox"/> Yes <input type="checkbox"/> No
Learning disabilities	<input type="checkbox"/> Yes <input type="checkbox"/> No
Psychosis or schizophrenia	<input type="checkbox"/> Yes <input type="checkbox"/> No
Depression for more than 2 weeks	<input type="checkbox"/> Yes <input type="checkbox"/> No
Anxiety that impaired adjustment	<input type="checkbox"/> Yes <input type="checkbox"/> No
Tics or Tourette's	<input type="checkbox"/> Yes <input type="checkbox"/> No
Alcohol abuse	<input type="checkbox"/> Yes <input type="checkbox"/> No
Substance abuse	<input type="checkbox"/> Yes <input type="checkbox"/> No
Antisocial behavior (assaults, thefts, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Arrests	<input type="checkbox"/> Yes <input type="checkbox"/> No

### Rating Scale: Self-Report of Childhood

Form completed by: \_\_\_\_\_

Date completed: \_\_\_\_\_

**Instructions:** Check the column that best portrays the frequency with which you displayed the following behaviors during childhood (e.g., birth to age 18 years)

	Never/ Don't Know	Sometimes	Often	Very Often
1. Is excessively shy with peers				
2. Has recurrent thoughts of death or suicide				
3. Feels worthless or guilty				
4. Has difficulty controlling worries				
5. Has experienced a drop in school grades or school work				
6. Loses things necessary for activities				
7. Is irritable for most of the day				
8. Does extremely odd things (excessive preoccupation with fantasy friends, talks to self in a strange way, etc.)				
9. Takes anger out on others or tries to get even				
10. Has strange ideas or beliefs that are not real (food is poisoned; people are trying to get me, etc.)				
11. Is depressed for most of the day				
12. Is touchy or easily annoyed by others				
13. Blurts out answers to questions before they have been completed				
14. Gets very upset when child expects to be separated from home or parents				
15. Fidgets with hands or feet or squirms in seat				
16. Has difficulty playing quietly				
17. Does things to deliberately annoy others				
18. Has experienced a big change in his/her sleeping habits—cannot sleep or sleeps too much				
19. Has low energy level or is tired for no apparent reason				

	Never/ Don't Know	Sometimes	Often	Very Often
20. Feels compelled to perform unusual habits (hand washing, checking locks, repeating things a set number of times)				
21. Is "on the go" or acts as if "driven by motor"				
22. Has difficulty following through on instructions and fails to finish things				
23. Has difficulty remaining seated when asked to				
24. Talks excessively				
25. Is angry or resentful				
26. Defies or refuses what you tell him/her to do				
27. Is over concerned about abilities in academic, athletic, or social activities				
28. Is forgetful in daily activities				
29. Argues with adults				
30. Shows little interest in (or enjoyment of) pleasurable activities				
31. Is easily distracted by other things going on				
32. Avoids tasks that require a lot of mental effort (schoolwork, homework, etc.)				
33. Runs about or climbs on things when asked not to do so				
34. Interrupts people or butts into other children's activities				
35. Has difficulty organizing tasks and activities				
36. Has difficulty awaiting turn in group activities				
37. Fails to give close attention to details or make careless mistakes				
38. Blames others for own misbehavior or mistakes				
39. Has extremely strange and illogical thoughts or ideas				
40. Loses temper				
41. Has difficulty sustaining attention in tasks or recreational activities				
42. Does not seem to listen when spoken to directly				
43. Has little confidence or is very self conscious				

### Rating Scale: Self-Report of Current Behavior

Form completed by: \_\_\_\_\_

Date completed: \_\_\_\_\_

**Instructions:** Check the column that best portrays the frequency with which you display the following behaviors currently.

	Never/ Don't Know	Sometimes	Often	Very Often
1. Is excessively shy with peers				
2. Has recurrent thoughts of death or suicide				
3. Feels worthless or guilty				
4. Has difficulty controlling worries				
5. Has experienced a drop in school grades or school work				
6. Loses things necessary for activities				
7. Is irritable for most of the day				
8. Does extremely odd things (excessive preoccupation with fantasy friends, talks to self in a strange way, etc.)				
9. Takes anger out on others or tries to get even				
10. Has strange ideas or beliefs that are not real (food is poisoned; people are trying to get me, etc.)				
11. Is depressed for most of the day				
12. Is touchy or easily annoyed by others				
13. Blurts out answers to questions before they have been completed				
14. Gets very upset when child expects to be separated from home or parents				
15. Fidgets with hands or feet or squirms in seat				
16. Has difficulty playing quietly				
17. Does things to deliberately annoy others				
18. Has experienced a big change in his/her sleeping habits—cannot sleep or sleeps too much				
19. Has low energy level or is tired for no apparent reason				

	Never/ Don't Know	Sometimes	Often	Very Often
20. Feels compelled to perform unusual habits (hand washing, checking locks, repeating things a set number of times)				
21. Is "on the go" or acts as if "driven by motor"				
22. Has difficulty following through on instructions and fails to finish things				
23. Has difficulty remaining seated when asked to				
24. Talks excessively				
25. Is angry or resentful				
26. Defies or refuses what you tell him/her to do				
27. Is over concerned about abilities in academic, athletic, or social activities				
28. Is forgetful in daily activities				
29. Argues with adults				
30. Shows little interest in (or enjoyment of) pleasurable activities				
31. Is easily distracted by other things going on				
32. Avoids tasks that require a lot of mental effort (schoolwork, homework, etc.)				
33. Runs about or climbs on things when asked not to do so				
34. Interrupts people or butts into other children's activities				
35. Has difficulty organizing tasks and activities				
36. Has difficulty awaiting turn in group activities				
37. Fails to give close attention to details or make careless mistakes				
38. Blames others for own misbehavior or mistakes				
39. Has extremely strange and illogical thoughts or ideas				
40. Loses temper				
41. Has difficulty sustaining attention in tasks or recreational activities				
42. Does not seem to listen when spoken to directly				
43. Has little confidence or is very self conscious				



### Rating Scale on Vignette - 1

Form completed by: \_\_\_\_\_

Date completed: \_\_\_\_\_

**Instructions:** Check the column that best portrays the frequency of the behaviors listed for the child who has just been described.

	Never/ Don't Know	Sometimes	Often	Very Often
1. Is excessively shy with peers				
2. Has recurrent thoughts of death or suicide				
3. Feels worthless or guilty				
4. Has difficulty controlling worries				
5. Has experienced a drop in school grades or school work				
6. Loses things necessary for activities				
7. Is irritable for most of the day				
8. Does extremely odd things (excessive preoccupation with fantasy friends, talks to self in a strange way, etc.)				
9. Takes anger out on others or tries to get even				
10. Has strange ideas or beliefs that are not real (food is poisoned; people are trying to get me, etc.)				
11. Is depressed for most of the day				
12. Is touchy or easily annoyed by others				
13. Blurts out answers to questions before they have been completed				
14. Gets very upset when child expects to be separated from home or parents				
15. Fidgets with hands or feet or squirms in seat				
16. Has difficulty playing quietly				
17. Does things to deliberately annoy others				
18. Has experienced a big change in his/her sleeping habits—cannot sleep or sleeps too much				
19. Has low energy level or is tired for no apparent reason				

	Never/ Don't Know	Sometimes	Often	Very Often
20. Feels compelled to perform unusual habits (hand washing, checking locks, repeating things a set number of times)				
21. Is "on the go" or acts as if "driven by motor"				
22. Has difficulty following through on instructions and fails to finish things				
23. Has difficulty remaining seated when asked to				
24. Talks excessively				
25. Is angry or resentful				
26. Defies or refuses what you tell him/her to do				
27. Is over concerned about abilities in academic, athletic, or social activities				
28. Is forgetful in daily activities				
29. Argues with adults				
30. Shows little interest in (or enjoyment of) pleasurable activities				
31. Is easily distracted by other things going on				
32. Avoids tasks that require a lot of mental effort (schoolwork, homework, etc.)				
33. Runs about or climbs on things when asked not to do so				
34. Interrupts people or butts into other children's activities				
35. Has difficulty organizing tasks and activities				
36. Has difficulty awaiting turn in group activities				
37. Fails to give close attention to details or make careless mistakes				
38. Blames others for own misbehavior or mistakes				
39. Has extremely strange and illogical thoughts or ideas				
40. Loses temper				
41. Has difficulty sustaining attention in tasks or recreational activities				
42. Does not seem to listen when spoken to directly				
43. Has little confidence or is very self conscious				

### Rating Scale on Vignette - 2

Form completed by: \_\_\_\_\_

Date completed: \_\_\_\_\_

**Instructions:** Check the column that best portrays the frequency of the behaviors listed for the child who has just been described.

	Never/ Don't Know	Sometimes	Often	Very Often
1. Is excessively shy with peers				
2. Has recurrent thoughts of death or suicide				
3. Feels worthless or guilty				
4. Has difficulty controlling worries				
5. Has experienced a drop in school grades or school work				
6. Loses things necessary for activities				
7. Is irritable for most of the day				
8. Does extremely odd things (excessive preoccupation with fantasy friends, talks to self in a strange way, etc.)				
9. Takes anger out on others or tries to get even				
10. Has strange ideas or beliefs that are not real (food is poisoned; people are trying to get me, etc.)				
11. Is depressed for most of the day				
12. Is touchy or easily annoyed by others				
13. Blurts out answers to questions before they have been completed				
14. Gets very upset when child expects to be separated from home or parents				
15. Fidgets with hands or feet or squirms in seat				
16. Has difficulty playing quietly				
17. Does things to deliberately annoy others				
18. Has experienced a big change in his/her sleeping habits—cannot sleep or sleeps too much				
19. Has low energy level or is tired for no apparent reason				

	Never/ Don't Know	Sometimes	Often	Very Often
20. Feels compelled to perform unusual habits (hand washing, checking locks, repeating things a set number of times)				
21. Is "on the go" or acts as if "driven by motor"				
22. Has difficulty following through on instructions and fails to finish things				
23. Has difficulty remaining seated when asked to				
24. Talks excessively				
25. Is angry or resentful				
26. Defies or refuses what you tell him/her to do				
27. Is over concerned about abilities in academic, athletic, or social activities				
28. Is forgetful in daily activities				
29. Argues with adults				
30. Shows little interest in (or enjoyment of) pleasurable activities				
31. Is easily distracted by other things going on				
32. Avoids tasks that require a lot of mental effort (schoolwork, homework, etc.)				
33. Runs about or climbs on things when asked not to do so				
34. Interrupts people or butts into other children's activities				
35. Has difficulty organizing tasks and activities				
36. Has difficulty awaiting turn in group activities				
37. Fails to give close attention to details or make careless mistakes				
38. Blames others for own misbehavior or mistakes				
39. Has extremely strange and illogical thoughts or ideas				
40. Loses temper				
41. Has difficulty sustaining attention in tasks or recreational activities				
42. Does not seem to listen when spoken to directly				
43. Has little confidence or is very self conscious				

### Rating Scale on Vignette - 3

Form completed by: \_\_\_\_\_

Date completed: \_\_\_\_\_

**Instructions:** Check the column that best portrays the frequency of the behaviors listed for the child who has just been described.

	Never/ Don't Know	Sometimes	Often	Very Often
1. Is excessively shy with peers				
2. Has recurrent thoughts of death or suicide				
3. Feels worthless or guilty				
4. Has difficulty controlling worries				
5. Has experienced a drop in school grades or school work				
6. Loses things necessary for activities				
7. Is irritable for most of the day				
8. Does extremely odd things (excessive preoccupation with fantasy friends, talks to self in a strange way, etc.)				
9. Takes anger out on others or tries to get even				
10. Has strange ideas or beliefs that are not real (food is poisoned; people are trying to get me, etc.)				
11. Is depressed for most of the day				
12. Is touchy or easily annoyed by others				
13. Blurts out answers to questions before they have been completed				
14. Gets very upset when child expects to be separated from home or parents				
15. Fidgets with hands or feet or squirms in seat				
16. Has difficulty playing quietly				
17. Does things to deliberately annoy others				
18. Has experienced a big change in his/her sleeping habits—cannot sleep or sleeps too much				
19. Has low energy level or is tired for no apparent reason				

	Never/ Don't Know	Sometimes	Often	Very Often
20. Feels compelled to perform unusual habits (hand washing, checking locks, repeating things a set number of times)				
21. Is "on the go" or acts as if "driven by motor"				
22. Has difficulty following through on instructions and fails to finish things				
23. Has difficulty remaining seated when asked to				
24. Talks excessively				
25. Is angry or resentful				
26. Defies or refuses what you tell him/her to do				
27. Is over concerned about abilities in academic, athletic, or social activities				
28. Is forgetful in daily activities				
29. Argues with adults				
30. Shows little interest in (or enjoyment of) pleasurable activities				
31. Is easily distracted by other things going on				
32. Avoids tasks that require a lot of mental effort (schoolwork, homework, etc.)				
33. Runs about or climbs on things when asked not to do so				
34. Interrupts people or butts into other children's activities				
35. Has difficulty organizing tasks and activities				
36. Has difficulty awaiting turn in group activities				
37. Fails to give close attention to details or make careless mistakes				
38. Blames others for own misbehavior or mistakes				
39. Has extremely strange and illogical thoughts or ideas				
40. Loses temper				
41. Has difficulty sustaining attention in tasks or recreational activities				
42. Does not seem to listen when spoken to directly				
43. Has little confidence or is very self conscious				

### Rating Scale on Vignette - 4

Form completed by: \_\_\_\_\_

Date completed: \_\_\_\_\_

**Instructions:** Check the column that best portrays the frequency of the behaviors listed for the child who has just been described.

	Never/ Don't Know	Sometimes	Often	Very Often
1. Is excessively shy with peers				
2. Has recurrent thoughts of death or suicide				
3. Feels worthless or guilty				
4. Has difficulty controlling worries				
5. Has experienced a drop in school grades or school work				
6. Loses things necessary for activities				
7. Is irritable for most of the day				
8. Does extremely odd things (excessive preoccupation with fantasy friends, talks to self in a strange way, etc.)				
9. Takes anger out on others or tries to get even				
10. Has strange ideas or beliefs that are not real (food is poisoned; people are trying to get me, etc.)				
11. Is depressed for most of the day				
12. Is touchy or easily annoyed by others				
13. Blurts out answers to questions before they have been completed				
14. Gets very upset when child expects to be separated from home or parents				
15. Fidgets with hands or feet or squirms in seat				
16. Has difficulty playing quietly				
17. Does things to deliberately annoy others				
18. Has experienced a big change in his/her sleeping habits—cannot sleep or sleeps too much				
19. Has low energy level or is tired for no apparent reason				

	Never/ Don't Know	Sometimes	Often	Very Often
20. Feels compelled to perform unusual habits (hand washing, checking locks, repeating things a set number of times)				
21. Is "on the go" or acts as if "driven by motor"				
22. Has difficulty following through on instructions and fails to finish things				
23. Has difficulty remaining seated when asked to				
24. Talks excessively				
25. Is angry or resentful				
26. Defies or refuses what you tell him/her to do				
27. Is over concerned about abilities in academic, athletic, or social activities				
28. Is forgetful in daily activities				
29. Argues with adults				
30. Shows little interest in (or enjoyment of) pleasurable activities				
31. Is easily distracted by other things going on				
32. Avoids tasks that require a lot of mental effort (schoolwork, homework, etc.)				
33. Runs about or climbs on things when asked not to do so				
34. Interrupts people or butts into other children's activities				
35. Has difficulty organizing tasks and activities				
36. Has difficulty awaiting turn in group activities				
37. Fails to give close attention to details or make careless mistakes				
38. Blames others for own misbehavior or mistakes				
39. Has extremely strange and illogical thoughts or ideas				
40. Loses temper				
41. Has difficulty sustaining attention in tasks or recreational activities				
42. Does not seem to listen when spoken to directly				
43. Has little confidence or is very self conscious				



APPENDIX G  
INSTITUTIONAL REVIEW BOARD  
APPROVAL FORMS

Oklahoma State University  
Institutional Review Board

Protocol Expires: 12/17/2004

Date : Friday, August 06, 2004

IRB Application No AS0350

Proposal Title: RATER BIAS IN RATINGS OF DISRUPTIVE BEHAVIOR

Principal  
Investigator(s) :

Cynthia Hartung  
215 N. Murray  
Stillwater, OK 74078

Monica Armendariz  
215 North Murray  
Stillwater, OK 74078

Reviewed and  
Processed as: Expedited

Approval Status Recommended by Reviewer(s) : Approved

**Modification**

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Please note that the protocol expires on the following date which is one year from the date of the approval of the original protocol:

Protocol Expires: 12/17/2004

Signature :



Carol Olson, Director of University Research Compliance

Friday, August 06, 2004

Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

**Oklahoma State University Institutional Review Board**

Date Tuesday, November 02, 2004 Protocol Expires: 11/1/2005

IRB Application No: AS0350

Proposal Title: RATER BIAS IN RATINGS OF DISRUPTIVE BEHAVIOR

Reviewed and Expedited  
Processed as: Continuation

Status Recommended by Reviewer(s): **Approved**

Principal Investigator(s) :

Cynthia Hartung  
215 N. Murray  
Stillwater, OK 74078

Monica Armendariz  
215 North Murray  
Stillwater, OK 74078

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Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

Signature :



Carol Olson, Chair, Institutional Review Board

Tuesday, November 02, 2004  
Date

VITA

Monica L. Armendariz

Candidate for the Degree of

Master of Science

Thesis: EFFECTS OF CHILD ETHNICITY ON RATERS' JUDGMENTS OF ADHD

Major Field: Clinical Psychology

Biographical:

Personal Data: Born in Silver City, New Mexico, on October 29, 1980. The daughter of Michael and Susie Armendariz.

Education: Graduated from Cobre High School, Bayard, New Mexico, in May 1999; received Bachelor of Arts degree in Psychology from New Mexico State University, Las Cruces, New Mexico in May 2003. Completed the requirements for the Master of Science degree with a major in Clinical Psychology at Oklahoma State University, Stillwater, Oklahoma, in May 2005.