


1-1-2010

Cross Informant Correlation : Validity of the Conners CBRS Parent and Teacher Scales

Tamara Ann-Harris Mitchell
tam_tam@herdalum.org

Follow this and additional works at: <http://mds.marshall.edu/etd>

 Part of the [Education Commons](#), and the [School Psychology Commons](#)

Recommended Citation

Mitchell, Tamara Ann-Harris, "Cross Informant Correlation : Validity of the Conners CBRS Parent and Teacher Scales" (2010). *Theses, Dissertations and Capstones*. Paper 130.

This Thesis is brought to you for free and open access by Marshall Digital Scholar. It has been accepted for inclusion in Theses, Dissertations and Capstones by an authorized administrator of Marshall Digital Scholar. For more information, please contact zhangj@marshall.edu.

CROSS INFORMANT CORRELATION: VALIDITY OF THE CONNERS CBRS PARENT
AND TEACHER SCALES

A Thesis submitted to the Marshall University Graduate College

In Partial Fulfillment of the
Requirements for the degree of
Educational Specialist

School Psychology

by
Tamara Ann-Harris Mitchell

Approved by
Dr. Sandra Stroebel, Ph.D., Committee Chairperson
Dr. Fred Krieg, Ph.D.
Dr. Edna Meisel, Ph.D.

Marshall University
May 2010

Acknowledgements

There are so many people I would like to thank that have helped me, not only finish this thesis, but who have supported me throughout my education. First and foremost my family, there have been countless hours devoted to school. I would not have made it without my mom (Judy), nana (Sue), husband (Daniel), and daughter (Gracyn). You have taken care of me, supported me and loved me through everything. Dani, you have been my rock and sister, always believing in me, even when I did not believe in myself. Libby, I could not have asked for a better mentor. You have taught me more than you will ever know. You have been my teacher, friend, confidant, and supporter. My internship has been more amazing than I could have ever thought it would have been, because of you. To the professors at Marshall, none of us would be as knowledgeable or as competent as school psychologists without you. Thank you for your support. Special thanks go out to my thesis committee for your help and patience with me. And last but not least, to my Gracyn, thank you for all your hugs, kisses, and laughter when mommy needed them most.

Table of Contents

Acknowledgements	ii
List of Tables	iv
Abstract	v
Chapter 1: Literature Review	1
Chapter 2: Methods	12
Chapter 3: Results	14
Chapter 4: Discussion	20
References	24

List of Tables

Table 1: Means and Standard Deviations	16
Table 2: Correlation of Current Sample and Relationship Strength	17
Table 3: Correlation Current Sample and Normative Sample Comparison	18
Table 4: Difference between Current Sample and Normative Sample r-values	19

ABSTRACT

The purpose of this study is to determine the amount of cross informant agreement on the Conners Comprehensive Behavior Rating content scales between Parents and Teachers of students at the Marshall University Summer Enrichment Program. Data was analyzed by comparing the 11 common content scales on both forms and determining if there is a cross informant correlation that is significant. Results showed a low correlation coefficient, which suggests a weak relationship between parents and teachers.

Cross Informant Correlation: Validity of the Conners CBRS Parent and Teacher Scales

Chapter 1

Literature Review

Mental health has become an increasingly necessary issue to address in the school systems of today (Wingenfeld, 2002). With this increase comes the need to have a comprehensive assessment in order to determine the needs of students and schools. One of the most common practices is to use multidimensional rating scales to assess students in order to gain more information when completing behavior analysis, referrals to outside agencies and determining if a student meets IDEA (Individuals with Disabilities Education Act) eligibility criteria (Hosp, Howell, & Hosp, 2003). Rating scales have versions for Parents, Teachers, and Students to complete so information can be obtained across settings and from different perspectives (Hosp, Howell, & Hosp, 2003). One such scale is the Conners Comprehensive Behavior Rating Scales which has a Parent form, a Teacher form, and Self-Report for Students. Once examiners obtain forms from multiple informants, the relationships between the form needs to be evaluated. The question then becomes how these forms correlate with each other. This study will attempt

to look at this correlation in terms of the Parent and Teacher Comprehensive Behavior Rating Scales.

School Psychology

The prevalence of social, emotional and behavioral issues in the educational system is becoming more commonplace every day (Wingenfeld, 2002). As more and more students suffer from these issues, it becomes apparent that school psychologists need to step in to perform comprehensive assessments to address the needs of the school and the students. School psychologists have become the mental health providers in the school. There have been reports of up to 10% of the children in the general education population may suffer from a psychiatric disorder (Rosenblatt & Rosenblatt, 1999). These statistics can be even higher when looking at a specific school, where 14 to 20% of students can have some sort of mental health problem (Wingenfeld, 2002). There are even more students who are suffering from a psychosocial, emotional, or behavioral problem that are at risk for not fulfilling their educational potential, in both regular and special education (Repie, 2005). These statistics show not only the need for school psychologist involvement, but also the need for tools that can allow for comprehensive assessments of these issues (Hosp, Howell, & Hosp, 2003). This is where rating scales become useful for the psychologist. They are one of the tools in the arsenal that can

help gain a complete picture of the child in his or her unique set of circumstances.

Types of Rating Scales

There are three different types of rating scales. The first is called an anchor rating scale. In this type of scale a person is asked to rate themselves on a particular item in present time. The examiner could ask the person how they are feeling on a scale of 1 to 10. The person would then pick a number based on how they are feeling in their present situation. These types of scales are flexible and can be given on the spot with little to no preparation. However, they do not paint the best portrait of a person. In one study, students with a diagnosis of Autism and Down Syndrome were given anchored rating scales on different items, such as how adaptable they feel they are, their level of hostility, and how compliant they feel. It was shown that the amount of consistency on these scales is based on the person and not necessarily on the scale itself (Bieberich & Morgan, 2004). Another study showed similar results when college students were presented with a scale in which they rated themselves on the future career goal of teaching. It was shown that lower reliability and lower test-retest reliability was obtained when the scale had fewer choices (Weng, 2004). While these scales are useful in certain

situations, they do not possess the structure to allow for a complete assessment of a person.

The second type of scale is called a diagnostic, single item scale. This is a scale that can be used to aid in the diagnosis of one disorder. There are many of these scales available, such as the Beck Depression Inventory, The Conners 3, and Children's Depression Inventory. All of these look at specific disorders such as depression, Attention Deficit Hyper-Activity Disorder, and Anxiety. The advantages of these types of scales include being simple, having a low respondent burden, and allowing for pre-treatment and post-treatment data (Martinez-Martin, 2010). But they can also allow for the misdiagnosis of a disorder. Since they are single item scales, they have a one track focus. This can lead to the possibility that anyone who responded to the scale can show signs of the disorder being examined (Fristad, Emery, & Beck, 1997). This has been shown to be a common disadvantage to single item scales. In the Children's Depression Inventory it was shown that children could score in a range that showed depressive symptoms without having the diagnosis (Fristad, Emery, & Beck, 1997).

The last type of scale is the multidimensional or multi symptom/diagnosis scale. This type of scale allows for a complete picture of the student to be obtained. They are scales

that assess for many types of problems and disorders that the respondent can be showing, aid in the process of identifying students who have symptoms of emotional and/or behavioral problems and evaluate level of impairment in the home, school and self-perception areas of the student's life (Wingenfeld, 2002). There are several functions that multi symptom scales can serve. They:

- A) Provide quantifiable information which can be held to standards of reliability and validity;
- B) Provide systematically organized information;
- C) Are efficient to complete and score;
- D) Include normative data which allow comparison of individual behaviors to that of large groups; and
- E) Can be used to compare ratings of different respondents or across settings (Hosp, Howell, & Hosp, 2003).

All of these functions allow for the school psychologist to use the scale to create better information to give the school, family, and student, but perhaps the most important is the reliability and validity of the rating scales. Reliability is the degree to which the rating scale produces consistent scores, not influenced by error that is random. Reliability is a prerequisite for validity which indicates if the scale actually measures what it is supposed to measure (Mitchell & Jolley, 2004). Some examples of these types of scales are the Achenbach

CBCL (Child Behavior Checklist), The BASC-II (Behavior Assessment System for Children), and the Conners CBRS (Comprehensive Behavior Rating Scale). There are also several disadvantages of using rating scales at times. Some of these are: information may not align with assessment goals and the information may not be accurate due to the bias or experience of the respondent (Hosp, Howell, & Hosp, 2003). Both advantages and disadvantages need to be considered when using multi-focus scales to assess students in the school system.

Use of Multi-Symptom / Diagnosis Rating Scales

Rating scales can be used for many different reasons. A multidimensional scale, like the CBRS, can be used to complete a Functional Behavioral Analysis (FBA), make an appropriate referral to an outside agency, and even rule out issues that are outlined by IDEA. When a school makes a referral to a school psychologist, it is the job of the psychologist to determine which instruments to use in order to answer the question at hand (Elliot & Busse, 1993). With an FBA, a psychologist could use a multi symptom rating scale in order to determine some reasons behind the student's behavior in the school or home setting. The scale provides data for the analysis. The same can be said for the referral to an outside agency. Knowing what some of the problems are can help the school psychologist determine the correct agency to which to refer the student or family. When it

comes to IDEA it is important to correctly assess which area the student falls under for placement, or which ones can be excluded. A multi-symptom rating scale can show if a student needs further assessment in an area in which they meet the qualifications, such as with an emotional behavioral disorder (Elliot & Busse, 1993). Rating scales provide a reliable and valid way to collect data on a student in order to provide much needed services.

Cross Informant Validity

It is important for participants in rating scales to have at least a moderate rate of agreement in their answers, because as it has been shown, this agreement can provide useful data on a student's behavior, and can lead to a specific suggested intervention or even a diagnosis. If the wrong diagnosis or intervention is developed it can cause more problems than it can solve. The more consistent participants' agreement the more accurate the results of the rating scale will be (Youngstrom, Findling, & Calabrese, 2003). This type of correlation falls under construct validity, which shows that the results of the rating scale are authentic, that they are actually measuring the psychological state that they claim to be measuring, such as on the content scale emotional distress. This is an abstract concept that is impossible to measure directly. It has to be

measured indirectly, which is something that a rating scale can accomplish (Mitchell & Jolley, 2004).

According to the Conners Comprehensive Behavior Ratings Scales Manual (2008), the CBRS has a mean cross informant correlation of 0.53 for parent to teacher scales. This tells us that there is moderate consistency between answers by parents and teachers. This cross informant correlation is relatively high according to similar multidimensional rating scales, such as the Achenbach CBCL and the BASC-II. The mean cross informant correlation for the BASC-II is 0.42 which is in the moderate range (Behavior Assessment System for Children II Manual, 2009). According to the Achenbach CBCL Manual (2001), the parent to teacher agreement is 0.29, which shows a weak relationship. Several outside sources have found the same weak relationship between parent and teacher agreement on the CBCL. One study examined parent and teacher agreement for children ages 5 to 6. It was shown that there was a low to moderate inter-rater agreement, especially for internalizing problems (Grietens, Onghena, Prinzie, Gadeyne, Van Asche, Ghesquiere, & Hellinckx, 2004). This was also shown in a study that examined standardization of the CBCL for Italian children. Parent and teacher agreement for 1423 children was calculated. A low to moderate agreement was found, which is similar to other studies on parent and teacher agreement for rating scales (Frigerio,

Cattaneo, Cataldo, Schiatti, Molteni, & Battaglia, 2004). The manual correlations show that there can be some inconsistencies when it comes to agreement between teacher and parent. This means that behavior and academic issues can continue, the student would not get the outside help they could need, and the qualifying criteria for IDEA would not be obtained.

All of the multidimensional rating scales that have been mentioned so far have a Teacher, Parent, and Self-Report form in which the participants are asked questions related to the student. However, it is often the Teacher and Parent forms that are used the most. Adults provide the primary data when it comes to children's behavioral and emotional issues. Those adults providing the data see the children in different situations and along diverging perspectives (Hinshaw, Han, Erhardt, & Huber, 1992). Some reasons for this inconsistency are the different settings, the experience of the teacher and the parent, and bias that the teacher or parent can have against the child. Teachers and parents all come from different situations; some parents have only 1 child, while others have several, teachers can have many years of experience or this could be their first year. All of these can play a part in disagreement between rating scale scores because different life experiences give responders different standards in which they view the child (Ferdinand, Van der Ende, & Verhulst, 2007).

Since the CBRS is new, there are no studies completed to compare the Conners scales. In order to gain a better understanding, there need to be studies done independently of the publisher. This study will attempt to look at how correlated the responses of parent and teacher are on the CBRS.

Research Hypothesis #1

It is hypothesized that there will be a significant correlation between parent report and teacher report based on 11 of the content scales (Emotional Distress, Hyperactivity/Impulsivity, Aggressive Behavior, Academic Difficulties, Violence Potential, Physical Symptoms, Separation Fears, Language, Math, Perfectionistic & Compulsive Behaviors, and Social Problems) of The Conners Comprehensive Behavior Rating Scale.

Research Hypothesis #2

There will be a significant difference between the normative sample and the current sample.

Null Hypothesis #1

There will be no significant correlation between parent report and teacher report based on 11 of the content scales of The Conners Comprehensive Behavior Rating Scale.

Null Hypothesis #2

There will be no significant difference between the normative and the current sample.

Chapter 2

Method

Participants

Subjects for this study were Parents and Teachers of Students who attended the Marshall University Summer Enrichment Program held in the summer of 2009. The total number consisted of 100 Parent/Teacher sets of scales. The MU Summer Enrichment program enrolls students in grades K-12, and places them in multi-age, multi-ability classrooms for about five weeks at four days a week (Krieg, Meikamp, O'Keefe, & Stroebel, 2006). The students come from diverse backgrounds in terms of race, ability, socio-economic, sex, and medical conditions. The teachers in the classrooms are graduate level students in the fields of literacy, special education, counselors, and school psychology.

Instrumentation

This study utilized the Conners Comprehensive Behavior Rating Scale. The Conners Comprehensive Behavior Rating Scale (CBRS) is a comprehensive assessment tool which assesses a wide range of behavioral, emotional, social, academic concerns, and disorders in children and adolescents (ages 6 - 18 years old). This report provides information about the parent and teacher's assessment of the child, how they compare to other children their age, and which scales and subscales are elevated. Scores

are reported as t-scores. Scores between 40-59 are Average, scores 60 through 69 are in the Elevated range, and scores of 70 or above are considered Very Elevated.

Procedure

The CBRS was mailed home to the parents before the Marshall University Summer Enrichment Program began. Parents were asked to complete the 203 item questionnaire on their student's behavior in the past month and return them to the Program on the first day of class. The forms were then sorted and it was determined which student's parents did not return their forms. An attempt was made to collect these forms by contacting the parent. As stated before the teachers of the Program were graduate students. They were asked to complete the 204 item questionnaire on the students' behavior during the summer. Since there were on average 6 teachers per 7 classrooms, they could decide who would fill out the CBRS during the last week of the Program. All data was collected at the end of the Program.

Chapter Three

Results

Data was analyzed between parent and teacher reports on the Conners CBRS for 11 content scales. Means, standard deviations, and correlations were obtained on each, as well as an average correlation for all 11 scales. All results can be seen in Tables 1 and 2 below.

Comparing Mean Parent and Teacher reports for each content scale

All parent mean scale scores fell in the average range, except those in Language and Math, which fell in the elevated range. On the teacher scales, mean scores all were average as well, except Violence Potential. Standard deviations for both parent and teacher scales ranged from 8 to 18, which would indicate variability within the scores of each group. See Table 1.

Correlations of Parent and Teacher reports for each content scale

Correlation coefficients were also obtained relating Parent to Teacher reports for each content scale. The results indicated that over half of the content scales showed a significant correlation at the $p < 0.05$ level (Hyperactivity/Impulsivity, Academic Difficulties, Separation Fears, Language, Math, and Perfectionistic & Compulsive Behaviors). It was also shown that

the strength of the relationships in the current sample were considered weak to no relationship except for Perfectionistic & Compulsive Behaviors, which was shown to be a moderate relationship. See Table 2.

Comparison of Current Sample r values to Normative Sample r values for each content scale

To determine if the Current Sample's content scale correlations were significantly different than the Normative Sample correlations, a Fisher's z transformation was conducted. It was found that 8 out of the 11 content scales showed a significant difference between the Current Sample r-values and the Normative Sample r-values (Hyperactivity/Impulsivity, Defiant/Aggressive, Academic Difficulties, Violence Potential Indicator, Language, Math, Social Problems, and Emotional Distress). It was also found that the mean Current Sample r-value (0.28) was less than the Normative Sample r-value (0.53). See Tables 3 and 4.

TABLE 1 Means and Standard Deviations

Conners CBRS Content Scale	Parent Report		Teacher Report	
	<i>Mean</i>	<i>Standard Deviation</i>	<i>Mean</i>	<i>Standard Deviation</i>
Hyperactivity / Impulsivity	57	16	51	11
Defiant / Aggressive	52	13	52	11
Academic Difficulties	48	10	53	11
Violence Potential Indicator	51	10	63	17
Physical Symptoms	53	14	48	8
Separation Fears	52	11	50	11
Language	60	16	51	10
Math	65	18	52	10
Perfectionistic & Compulsive Behaviors	50	10	47	6
Social Problems	58	17	55	10
Emotional Distress	55	16	49	10

TABLE 2 Correlations of Current Sample and Relationship Strength

Conners CBRS Content Scale	Correlation Between Teacher and Parent	Strength of Relationship
Hyperactivity / Impulsivity	0.26	Weak
Defiant / Aggressive	0.10	Weak or None
Academic Difficulties	0.37	Weak
Violence Potential Indicator	0.15	Weak or None
Physical Symptoms	0.19	Weak or None
Separation Fears	0.39	Weak
Language	0.39	Weak
Math	0.35	Weak
Perfectionistic & Compulsive Behaviors	0.40	Moderate
Social Problems	0.24	Weak
Emotional Distress	0.24	Weak
Mean Correlation	0.28	Weak

TABLE 3 Correlation Current Sample and Normative Sample
Comparison

Conners CBRS Content Scale	Correlation Between Parent and Teacher	
	Current Sample	Normative Sample
Hyperactivity / Impulsivity	0.26	0.60
Defiant / Aggressive	0.10	0.60
Academic Difficulties	0.37	0.67
Violence Potential Indicator	0.15	0.65
Physical Symptoms	0.19	0.29
Separation Fears	0.39	0.33
Language	0.39	0.65
Math	0.35	0.61
Perfectionistic & Compulsive Behaviors	0.40	0.42
Social Problems	0.24	0.48
Emotional Distress	0.24	0.53
Mean Correlation	0.28	0.53

TABLE 4 Difference between Current Sample and Normative Sample
r-values

Conners CBRS Content Scale	z Scores	Probability Level
Hyperactivity / Impulsivity	3.27	0.001*
Defiant / Aggressive	4.57	0.000*
Academic Difficulties	3.28	0.001*
Violence Potential Indicator	4.76	0.000*
Physical Symptoms	0.82	0.412
Separation Fears	0.49	0.624
Language	2.82	0.005*
Math	2.68	0.007*
Perfectionistic & Compulsive Behaviors	0.15	0.881
Social Problems	2.14	0.033*
Emotional Distress	2.65	0.008*

* Indicates Significance Attained at the $p < 0.05$ level

Chapter Four

Discussion

The current study focused on examining the cross informant agreement between parents and teachers on the Conners CBRS. The hypothesis was that there would be a moderate cross informant agreement between parent report and teacher report, similar to the cross informant agreement of the normative sample that was discussed in the Conners CBRS Manual (2008). According to the results obtained, a low cross informant agreement was found between parents and teachers. As shown above the mean correlation of the current sample was 0.28 which shows a weak relationship. The normative sample mean correlation was 0.53, which is a moderate relationship. When looking at the content scales' individual correlations weak to no relationship was found for 10 of the scales, which was different from the normative sample that showed mostly moderate relationships on the individual content scales.

One of the reasons the mean of the correlation was low was that some of the content scales were very low themselves. Of the 11 content scales 5 had a correlation coefficient of 0.10 to 0.24. These scales were Defiant / Aggressive behavior, Violence Potential Indicator, Physical Symptoms, Social Problems and Emotional Distress. These 5 scales are dependent on recognizing issues that the student has that are considered either internal

or external behavior or emotions. When it comes to internal types of behaviors (Social Problems and Emotional Distress) it is often hard for any rater to know the thoughts or feelings of the child. Examining teacher scales as compared to parent scales would not allow for an in-depth, accurate look at what the students are thinking and feeling. While these internalizing behaviors can manifest in behaviors it is possible that those behaviors can be misinterpreted by both parents and teachers (Karver, 2006). This misinterpretation can lead to false scores at either end.

Externalizing behaviors can also be misunderstood, but less so than internalizing behaviors. These behaviors can be misinterpreted based on the person who is observing them. If a teacher has had difficulties with a student he or she might be prone to report higher difficulties than a parent, especially on the content scales of Defiant/Aggressive and Violence Potential Indicator (Youngstrom, Loeber, & Stouthamer-Loeber, 2000). The student could also be exhibiting these behaviors more in the classroom than in the home setting.

The content scale of Perfectionistic and Compulsive Behaviors had a correlation of 0.40 in the current sample and a correlation of 0.42 in the normative sample. One of the reasons for this was that the current sample is more like the normative sample, but just for this content scale. The normative sample

looks at a cross-section of the population. This would include students who could come from a referred population, as well as students who would not be referred. The current sample is made up of students from the referred population. These students typically are not perfectionistic and compulsive. Therefore, the current sample is most like the normative sample in these behaviors.

Limitations

There are several limitations in this study. One of these is the sample size. There were only 65 sets of participants. The normative sample had 1170 sets of participants. This allows for more generalization to the overall population. It would also be possible in the normative sample for data to be analyzed based on demographic information. This is not possible in the current sample.

Another limitation is the teachers that filled out the CBRS. All of the teachers came from the School Psychology program at Marshall University. This could have skewed the results, based on the teachers' background. Coming from a psychology standpoint caused the teachers to have different biases. The CBRS Teacher Scale was designed for teachers in the education field to respond to, not psychologists. There is also a difference in the time the teachers in the program knew the students as compared to how long a teacher in a typical school

setting might know the students. Even though the CBRS states to look at the student and their behavior in the last month, knowing the child for longer than a month would allow the teachers to know if the behavior that was being exhibited was different. The teachers in the program knew the students for 1 month. There was no baseline on which to base the current behavior.

Future Research

This current study only looked at the content scales of the CBRS. Future research could be conducted on the CBRS by looking at the DSM (Diagnostic and Statistical Manual) scales agreement between responders. Also studying all teachers who work with a student to compare results for agreement would give further information on inter-rater reliability. A comparison between the CBRS and other rating scales would also be helpful. Finally, examining teacher, parent, and youth reports for agreement could yield valuable research.

References

- Bieberich, A. A., & Morgan, S.B. (2004). Self-regulation and affective expression during play in children with Autism or Down Syndrome: A short-term longitudinal study. *Journal of Autism and Developmental Disorders, 34*(4), 439-448. Retrieved April 10, 2010 from Ebscohost database.
- Brauner, C.B. & Stephens, C.B. (2006). Estimating the prevalence of early childhood serious emotional/behavioral disorders: challenges and recommendations. *Public Health Reports, 121*(3), 303-310. Retrieved January 5, 2010 from Ebscohost database.
- Conners, C.K. (2008). *Conners comprehensive behavior rating scales manual*. Multi-Health Systems Inc: Canada.
- Elliot, S., & Busse, R.T. (1993). Behavior rating scales: issues of use and development. *School Psychology Review, 22*(2), 313-321. Retrieved April 10, 2010 from Ebscohost database.
- Ferdinand, R.F., Van der Ende, J., & Verhulst, F.C. (2007). Parent-teacher disagreement regarding behavioral and emotional problems in referred children is not a risk factor for poor outcome. *European Child & Adolescent Psychiatry, 16*(2), 121-127. Retrieved April 10, 2010 from Ebscohost database.

- Frigerio, A., Cattaneo, C., Cataldo, M.G., Schiatti, A., Molteni, M., & Battaglia, M. (2004). Behavioral and emotional problems among Italian children and adolescents aged 4 to 18 years as reported by parents and teachers. *European Journal of Psychological Assessment, 20*(2), 124-133.
- Fristad, M.A., Emery, B.L., & Beck, S.J. (1997). Use and abuse of the children's depression inventory. *Journal of Consulting and Clinical Psychology, 65*(4), 699-702. Retrieved April 10, 2010 from Ebscohost database.
- Grietens, H., Onghena, P., Prinzie, P., Gadeyne, E., Van Assche, V., Ghesquiere, P., & Gellinckx, W. (2004). Comparison of mothers', fathers', and teachers' reports on problem behavior in 5 to 6 year old children. *Journal of Psychopathology & Behavioral Assessment, 26*(2), 137-146. Retrieved April 10, 2010 from Ebscohost database.
- Hinshaw, S.P., Han, S.S., Erhardt, D., & Huber, A. (1992). Internalizing and externalizing behavior problems in preschool children: Correspondence among parent and teacher ratings and behavior observations. *Journal of Clinical Child Psychology, 21*(2), 143-150. Retrieved January 5, 2010 from Ebscohost database.

- Hosp, J.L., Howell, K.W., & Hosp, M.K. (2003). Characteristics of behavior rating scales: Implications for practice in assessment and behavioral support. *Journal of Positive Behavior Interventions*, 5(4), 201-208. Retrieved January 5, 2010 from Ebscohost database.
- Karver, M.S. (2006). Determinants of multiple informant agreement on child and adolescent behavior. *Journal of Abnormal Child Psychology*, 34(2), 252-262. Retrieved January 5, 2010 from Ebscohost database.
- Krieg, F.J., Meikamp, J., O'Keefe, S. & Stroebel, S. S. (2006). Field-based experience in light of changing demographics. *Trainers' Forum*, 25, 15-17.
- Martinez-Martin, P. (2010). Composite rating scales. *Journal of the Neurological Sciences*, 289(1-2), 7-11. Retrieved April 10, 2010 from Ebscohost database.
- McKevitt, B.C. & Elliott, S.N. (2005). Observations and ratings of preschool children's social behavior: Issues of representativeness and validity. *Psychology in the Schools*, 42(1). Retrieved January 5, 2010 from Ebscohost database.
- Mitchell, M.L., & Jolley, J.M. (2004). *Research design explained*. California: Thomson.

- Repie, M.S. (2005). A school mental health issues survey from the perspective of regular and special education teachers, school counselors, and school psychologists. *Education and Treatment of Children, 28*(3), 279-298. Retrieved February 15, 2010 from Ebscohost database.
- Rosenblatt, J.A., & Rosenblatt, A. (1999). Youth functional status and academic achievement in collaborative mental health and education programs: Two California care systems. *Journal of Emotional and Behavioral Disorders, 7*, 21-30. Retrieved January 5, 2010 from Ebscohost database.
- Shapiro, E.D., & Heick, P.F. (2004). School psychologist assessment practices in the evaluation of students referred for social/behavioral/emotional problems. *Psychology in the Schools, 41*(5), 551-561. Retrieved January 5, 2010 from Ebscohost database.
- Stanger, C., & Lewis, M. (1993). Agreement among parents, teachers, and children on internalizing and externalizing behavior problems. *Journal of Clinical Child Psychology, 22*(1), 107-115. Retrieved February 15, 2010 from Ebscohost database.
- Wingenfeld, S. A. (2002). Assessment of behavioral and emotional difficulties in children and adolescents. *Peabody Journal of Education, 77*(2), 85-105. Retrieved January 5, 2010 from Ebscohost database.

Youngstrom, E.A., Findling, R.L., & Calabrese, J.R. (2003).

Who are the comorbid adolescents? Agreement between psychiatric diagnosis, youth, parent and teacher report.

Journal of Abnormal Child Psychology, 31(3), 231-245.

Retrieved February 15, 2010 from Ebscohost database.

Youngstrom, E., Loeber, R., & Stouthamer-Loeber, M. (2000).

Patterns and correlates of agreement between parent,

teacher, and male adolescent ratings of externalizing and

internalizing problems. *Journal of Consulting and Clinical*

Psychology, 68(6), 1038-1050. Retrieved February 15, 2010

from Ebscohost database.