

Evaluating Childhood Bipolar Disorder - A Survey of School Psychologists' Knowledge and Practices

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Abstract

Using data gathered from the *Childhood Bipolar Disorder Survey*, this study explored Pennsylvania school psychologists' knowledge and practices when evaluating children for Bipolar Disorder (BPD). Results indicate that only a small percentage of school referrals involved children or adolescents with BPD.

Participating school psychologists were moderately familiar with both the literature and psychopharmacology surrounding childhood BPD. Although doctoral-prepared school psychologists were permitted to diagnose childhood BPD more than non-doctoral practitioners, approximately half of participants trained to diagnose childhood BPD were not allowed to do so in their respective schools. Participants identified disturbed mood, depression, grandiosity, rapid cycling, and sensation seeking as the more important symptoms influencing their understanding of childhood BPD. School psychologists used clinical history, formal diagnostic criteria, collateral data, and behavioral observations as their main instruments when making a diagnosis. Educational implications and future directions for research are discussed.

Evaluating Childhood Bipolar Disorder - A Survey of School Psychologists' Knowledge and Practices

Professional interest in the topic of Bipolar Disorder (BPD) has increased dramatically over the past decade (American Psychiatric Association, 2003). Once considered rare in children, BPD is becoming much more common than ever realized (Cicero, El-Mallakh, Holman, & Robertson, 2003; Wozniak, Biederman, & Kiely, 1995). With each generation a higher incidence of BPD has been reported, with the first episode earlier in the child than in the parent (Johnson & Roberts, 1995). This disorder can appear in children and adolescents, although there is some disagreement about this among professionals.

BPD typically emerges in late adolescence or early adulthood; but in some cases, it begins earlier (National Institute of Mental Health, 2001). Since no large epidemiological studies have been published regarding BPD in children younger than 9 years of age, the incidence and prevalence of this disorder during the early elementary-school years are unknown (McClure, Kubisyn, & Kaslow, 2002). However, the adult BPD literature suggests that 20-40% of adults have their onset during childhood and adolescence (Joyce, 1984; Lish, Dime-Meehan, Whybrow, Price, & Hirschfield, 1994). While there is no community data on the prevalence of childhood BPD, it may be relatively common in clinically referred children (Wozniak et al., 1995).

Childhood BPD appears to be a much more chronic condition that has a very early onset age (Carlson, 1995). Frazier, Doyle, Chiu, and Coyle (2002) purported that the actual prevalence of childhood BPD will be difficult to ascertain until a general consensus is reached on a definition of bipolarity in children. Estimates of the prevalence of childhood-onset BPD appear to be limited not only by the lack of epidemiological studies, but also by the historical bias against diagnosing BPD in this age group (Papolos & Papolos, 2002). The belief that BPD usually begins in late adolescence or early adulthood—rarely in childhood or early adolescence—is still held by some mental health professionals, suggesting that more research and practical information are needed to clarify the onset issue (Boucher, 1999).

Whether many young people who are currently given the diagnosis of BPD actually suffer from this condition has also come into question (Biederman, 1998; Klein, Pine, & Klein, 1998). Conversely, many youths who do suffer from BPD are often symptomatic for several years before a correct diagnosis is made (Findling, Gracious, McNamara, Youngstrom, Demeter, & Calabrese 2001; Geller & Luby, 1997). Specific features and diagnostic boundaries of childhood BPD remain controversial. Moreover, the differentiation of childhood BPD from other disorders is challenging, owing both to high comorbidity with other common childhood disorders and to frequent lack of an episodic course typical of adult BPD (Faedda, Baldessarini, Glovinsky, & Austin, 2004). Until relatively recently, almost all available data on BPD in children and adolescents were derived from small samples of patients and anecdotal reports (Papolos & Papolos, 2002).

Regardless of the questions and disagreement that have surrounded childhood BPD, our knowledge of the phenomenology and biosocial treatment of this condition has been expanding rapidly in recent years (Geller & DelBello, 2003). A growing interest in childhood BPD has been seen in the rise of federally funded projects in children (cf. IDEA, 1997) and the diverse areas that such projects encompass, including phenomenology, natural history, family studies, offspring, epidemiology, neuroimaging, treatment, and preclinical studies (National Institute of Mental Health, 2001).

BPD is a severe, chronic, life-threatening illness (Davazno, Yue, Belin, Mintz, Venkatraman, Santoro, Barnett, & McCracken, 2003) that, despite its severe and chronic nature, frequently goes either undetected or misdiagnosed (Rivas-Vasquez, Rey, Johnson, Blais, & Rivas-Vasquez, 2002). Geller and DelBello (2003) revealed that mood disorders have been largely under-diagnosed in children. It is interesting that most bipolar patients consult as many as three professionals over eight years before diagnosis (Birnbaum, Shi, & Dial, 2003). Reddy and Srinath (2000) offered plausible reasons for under-diagnosis or misdiagnosis, including the widely held belief that BPD is uncommon in children and the symptomatic overlay between mania and other disorders such as attention deficit hyperactivity disorder (ADHD), conduct disorder, or schizophrenia. Similarly, Birmaher (2004) revealed that BPD is commonly misdiagnosed because of the presence of coexisting psychiatric conditions and the fact that some of BPD symptoms (e.g., defiance, hyperactivity, inattention, and irritability) overlap with the symptoms of other psychiatric disorders. According to Papolos and Papolos (2002), childhood BPD is often overlooked because the illness manifests itself differently in children than in adults.

Initially, BPD may have a clinical presentation similar to ADHD; however, there is some concern that mania is frequently mistaken for ADHD in children (Biederman, 1998). It can indeed be difficult to distinguish between manic symptoms and disruptive behaviors in children. It also remains unclear whether the diagnostic criteria for manic episodes in the Diagnostic and

Statistical Manual of Mental Disorders (4th ed., text revision), or DSM-IV-TR (American Psychiatric Association, 2000), are appropriate for children (McClure et al., 2002). Unlike unipolar depression, which is well established as a valid and useful construct in children, McClure and associates (2002) noted that the concept of childhood BPD continues to generate controversy. Given these ambiguities, it should prove informative to investigate how school psychologists conceptualize childhood BPD in their current practices and distinguish it from other disorders with comorbid characteristics.

Statement of Purpose

The purpose of this study is to understand how school psychologists identify BPD in children of elementary and middle school age (6-14 years). As a preliminary investigation relying on survey methodology, it will explore professional consensus concerning school psychologists' assessment and/or diagnosis of childhood BPD. Childhood BPD is clearly an important issue that impacts school psychology practice because children with a BPD diagnosis are likely to have difficulty academically, behaviorally, and socially. However, no study has yet been undertaken to assess school psychologists' familiarity and practices with children and adolescents suffering from BPD. Consequently, present findings may generate future research into the evaluation of treatment outcomes for BPD youth.

Methods

Survey Instrument

As shown below, the Childhood Bipolar Disorder Survey was sent to each participant. The purpose of this questionnaire—blending demographic data, 7-point Likert-scale ratings, closed questions soliciting “yes” or “no” responses, and open-ended inquiry—was to assess various knowledge and practice domains associated with childhood BPD. Survey items were selected based on a review of the diagnostic and treatment literature regarding BPD in children.

Childhood Bipolar Disorder Survey

Childhood Bipolar Disorder Survey

Age _____
 Gender _____
 Ethnicity _____
 Highest Degree _____
 Years Employed as a School Psychologist _____

1. Are you permitted in the school setting to identify childhood bipolar disorder (BPD)? Yes No
2. Do you feel that your training has prepared you to diagnose childhood BPD? Yes No
3. Approximately what percentage of your school referrals (e.g., assessment, consultation) involves children or adolescents with BPD? _____
4. What are the measures that you would use to assist in diagnosing childhood BPD?
5. Are there any other measures that you would use that you do not have access to in the school setting? If so, what are they?

For items 6 and 7, use the following scale in providing your responses:

1 = not familiar, 3 = somewhat familiar, 5 = familiar, 7 = very familiar

6. How familiar are you with the literature on childhood BPD?
 1 2 3 4 5 6 7
7. How familiar are you with psychopharmacology used in treating childhood BPD?
 1 2 3 4 5 6 7

8. How important are each of the following symptoms to your understanding of childhood BPD?

1 = not important; 3 = somewhat important; 5 = important; 7 = very important

Expansiveness	1	2	3	4	5	6	7
Hypersexuality	1	2	3	4	5	6	7
Pressured Speech	1	2	3	4	5	6	7
Disturbed Mood	1	2	3	4	5	6	7
Grandiosity	1	2	3	4	5	6	7
Hyperactivity	1	2	3	4	5	6	7
Sensation-Seeking	1	2	3	4	5	6	7
Aggression	1	2	3	4	5	6	7
Rapid Cycling	1	2	3	4	5	6	7
Night Terrors	1	2	3	4	5	6	7
Depression	1	2	3	4	5	6	7

Participants

Participants, who ranged in age from 25 to 66 years ($M = 50.78$), were school psychologists holding membership in the Pennsylvania Psychological Association (PPA). Out of 150 surveys mailed to participants in two waves, 67 were returned (45%). Ninety-seven percent of respondents were Caucasian. Fifty-one percent of respondents held doctorates, though not all degrees were in school psychology.

Sixty-one percent of respondents were female, whereas 39% were male. The average number of years employed as a school psychologist was approximately 18; however, the survey did not inquire about public school, private school, and private practice employment.

Procedure

Participants were selected randomly from a comprehensive list of PPA members. Along with the Childhood Bipolar Disorder Survey, participants received two copies of an informed consent form and a self-addressed, stamped return envelope. Follow-up prompt was mailed as needed.

Participants were asked to return one signed consent form with the completed survey, whereas the second copy was for their personal records. The consent form included a postal and e-mail address for respondents to contact the lead researcher with questions about the study and to obtain the results of the investigation.

When informed consent was obtained, participants' signed consent forms were separated from their questionnaires in order to maintain anonymity. Questionnaires were accessed only to record participants' responses. Participation was voluntary and no risks were apparent. Questionnaire completion time was estimated at approximately 10-15 minutes.

Results

Participants identified that approximately 3.5% of their school referrals involved children or adolescents with BPD. On a Likert rating scale with anchors at 1 (not familiar) and 7 (very familiar), participants indicated mid-range familiarity with the literature on childhood BPD ($M = 4.10$, $SD = 1.52$). Participants were similarly familiar with the psychopharmacology used in treating childhood BPD ($M = 3.96$, $SD = 1.49$).

Table 1 displays ratings that participants assigned to the importance of 11 different symptoms in understanding childhood BPD. These ratings were anchored by 1 (not important) and 7 (very important) on a Likert scale.

Table 1

Table 1: Importance of Symptoms in Understanding Childhood BPD

Bipolar Symptoms	Mean	Standard Deviation
Disturbed Mood	6.00	1.17
Depression	5.94	1.04
Grandiosity	5.52	1.41
Rapid Cycling	5.42	1.73
Sensation Seeking	5.23	1.57
Hyperactivity	5.16	1.26
Aggressiveness	4.78	1.73
Expansiveness	4.65	2.12
Pressured Speech	4.61	1.68
Hypersexuality	4.31	1.77
Night Terrors	3.70	1.84

A supplemental analysis was also performed on the percentage of participants using instruments to diagnose childhood BPD. Table 2 reports the most frequently used instruments for diagnosis. Results suggest that rating scales, clinical history, *DSM-IV-TR*, interview, collateral information (e.g., parent/guardian, prior evaluations), and behavioral observations were the most popular measures for diagnosing childhood BPD.

Conversely, those measures used with considerably less frequency were Devereux Scales of Mental Disorders, assessment of executive functions, Yale Bipolar Rating Scale, Functional Behavior Assessment, and Young Mania Rating Scale.

Table 2

Table 2: Percentage of Participants Using Instruments to Diagnose Childhood BPD

Instruments	Percent of Usage
Clinical History	64.10
DSM-IV TR	48.70
Interview	48.70
Collateral Information	35.90
Behavior Assessment System for Children	30.80
Behavioral Observations	30.80
Minnesota Multiphasic Inventory	23.10
Auchenbach	20.50
WISC-IV	17.90
Projective Tests	13.80
Connor's Rating Scales	12.90
Cognitive Assessment System	5.10
Depression Inventory	5.10
NEPSY	5.10
Devereux Scales of Mental Disorders	2.60
Executive Function Assessment	2.60
Yale Bipolar Rating Scale	2.60
Functional Behavior Assessment	1.00
Young Mania Rating Scale	1.00

Information was also obtained about whether or not respondents were permitted to diagnose childhood BPD in their respective schools. Results indicate that 43% of respondents were allowed to diagnose, with approximately two-thirds of this group falling into the doctoral-prepared category. Results also show that 42% of the respondents were trained to diagnose; again, roughly two-thirds with doctoral-level training. However, approximately 50% of those practitioners trained to diagnose childhood BPD were not allowed to do so. Reasons for this finding were not identified through the present survey.

Discussion

Overall, survey results show that participating school psychologists were moderately informed about both the literature and psychopharmacology surrounding childhood BPD. Additionally, findings indicate that these same school psychologists used prudent diagnostic strategies for determining childhood BPD, including clinical history, formal diagnostic criteria, collateral data, and behavioral observations. Among the more important symptoms influencing participants' understanding of childhood BPD are disturbed mood, depression, grandiosity, rapid cycling, and sensation seeking. Results also suggest that the diagnosis of BPD in schools falls mainly within the purview of doctoral-level school psychologists.

Childhood BPD is an important issue affecting school psychology practice because children and adolescents with this disorder often have academic problems (Birmaher, 2004) and can be particularly disruptive in the school environment (Schlozman, 2002). Even more incumbent on psychologists in school settings is to recognize childhood BPD symptoms that may go undetected by other school personnel and to comprehensively evaluate for symptoms as they are presented and impact a child's school performance. Although childhood BPD is a relatively new point of departure for discussion in the literature on mood disorders, current findings indicate that its relevance for graduate education has important implications. Moreover, these practical implications for graduate training potentially impact the knowledge bases school psychologists bring to school settings that can, in turn, affect base-rate diagnoses (if and when such diagnoses are permissible). Such knowledge can also bolster awareness among school personnel of childhood BPD and improve accompanying support-team decisions and instructional program planning relative to student need. In short, it is possible to enhance student advocacy in response to education and cultural awareness about childhood BPD.

In light of some of the limitations of this preliminary survey-based investigation, there is a call for additional research into evaluating childhood BPD that might address setting (urban vs. rural vs. suburban), participant sample (local vs. national), ethnic and racial diversity among respondent groups, school district size, school philosophy, differences in diagnosing BPD across grade levels, differences in public versus private school diagnoses, and private versus public school-psychologists' practices. Future directions for research might also involve a larger sample size and quantitative comparisons between doctoral and non-doctoral school psychologists.

References

- American Psychiatric Association (2003). Practice guideline for the treatment of patients with bipolar disorder (revision). *American Journal of Psychiatry*, 159, 1-50.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders (4th ed.)* text revision. Washington, DC: Author.
- Biederman, J. (1998). Resolved: Mania is mistaken for ADHD in prepubertal children. Affirmative rebuttal: Author. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 1096-1098.
- Birmaher, B. (2004). *New hope for children and teens with bipolar disorder*. New York: Three Rivers Press.

- Birnbaum, H., Shi, L., & Dial, E. (2003). Economic consequences of not recognizing bipolar disorder patients: A cross-sectional descriptive analysis. *Journal of Clinical Psychology, 64*, 1201-1209.
- Boucher, R. C. (1999). *Students in discord: Adolescents with emotional and behavioral disorders*. Westport, Connecticut: Greenwood Press.
- Carlson, G. A. (1995). Identifying prepubertal mania. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*, 750-753.
- Cicero, D., El-Mallakh, R. S., Holman, J., & Robertson, J. (2003). Antidepressant exposure in bipolar children. *Psychiatry, 66*, 316-321.
- Davazno, P., Yue, K., Belin, T., Mintz, J., Vekatraman, T. N., Santoro, E., Barnett, S., & McCracken, J. (2003). Proton magnetic resonance of spectroscopy of bipolar disorder versus intermittent explosive disorder in children and adults. *American Journal of Psychiatry, 160*, 1442-1452.
- Faedda, G. I., Baldessarini, R. J., Glovinsky, I. P., & Austin, N. B. (2004). Pediatric bipolar disorder: Phenomenology and course of illness. *Bipolar Disorders, 6*, 305.
- Findling, R. I., Gracious, B. L., McNamara, N. K., Youngstrom, E. A., Demeter, C., & Calabrese, J. R. (2001). Rapid continuous cycling and psychiatric comorbidity in pediatric bipolar I disorder. *Bipolar Disorders, 3*, 202-210.
- Frazier, J. A., Doyle, R., Chiu, S., & Coyle, J. T. (2002). Treating a child with asperger's and comorbid bipolar disorder. *American Journal of Psychiatry, 159*, 13-21.
- Geller, B., & DelBello, M. P. (2003). *Bipolar disorder in early childhood and adolescence*. New York: Guilford Press.
- Geller, B., & Luby, J. (1997). Child and adolescent bipolar disorder: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 1168-1176.
- Individuals with Disabilities Education Act (IDEA) Amendments of 1997, Pub. L. No. 94-142, 20, U.S.C.A. § 1400.
- Johnson, S. L., & Roberts, J. E. (1995). Life events and bipolar disorders: Implications from biological theories. *Psychological Bulletin, 117*, 434-449.
- Joyce, P. R. (1984). Age of onset in bipolar affective disorder and misdiagnosis as schizophrenia. *Psychological Medicine, 14*, 145-149.
- Klein, R. G., Pine, D. S., & Klein, D. F. (1998). Resolved: Mania is mistaken for ADHD in prepubertal children. Debate forum (negative). *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 1093-1096.
- Lish, J. D., Dime-Meenam, S., Whybrow, P. C., Price, R. A., & Hirschfield, R. M. (1994). The national depressive and manic-depressive association survey of bipolar members. *Journal of Affective Disorders, 31*, 281-294.

McClure, E. B., Kubisyn, T., & Kaslow, N. J. (2002). Advances in the diagnosis and treatment of childhood mood disorders. *Professional Psychology: Research and Practice*, 33, 728-735.

National Institute of Mental Health (2001). Child and adolescent bipolar disorder: An update. NIMH 00-4778. Retrieved May 2006, from <http://nimh.nih.gov/publicat/bipolarupdate>

Papolos, D. F., & Papolos, J. D. (2002). *The bipolar child: The definitive and reassuring guide to childhood's most misunderstood disorder – revised and expanded edition*. New York: Broadway Books.

Reddy, Y. C., & Srinath, S. (2000). Juvenile bipolar disorder. *Acta Psychiatrica Scandinavica*, 102, 162-170.

Rivas-Vasquez, R. V., Rey, G. J., Johnson, S. L., Blais, M. A., & Rivas-Vasquez, A. (2002). Current treatments for bipolar disorder: A review and update for psychologists. *Professional Psychology: Research and Practice*, 33, 212-233.

Schlozman, S. C. (2002). The shrink in the classroom: An explosive debate: The bipolar child. *Educational Leadership*, 60, 89-92.

Wozniak, J., Biederman, J., & Kiely, K. (1995). Mania-like symptoms suggestive of childhood-onset bipolar disorder in clinically referred children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 867-876.