

SECTION CONTENTS

- 530 The Youngest Children in Each School Cohort Are Overrepresented in Referrals to Mental Health Services.
- 535 Neurocognitive Effects of Neurofeedback in Adolescents With ADHD: A Randomized Controlled Trial.
- Online *Exclusive*:
- e457 Psychiatric Comorbidity in Hospitalized Adolescents With Borderline Personality

Visit
PSYCHIATRIST.COM
 Enter Keyword

For more information about

 see page 543

Age in School Cohort, Borderline Personality Disorder, and Neurofeedback

This section of Focus on Childhood and Adolescent Mental Health presents findings on age in school cohort, in relation to mental health referrals; neurofeedback intervention for attention-deficit/hyperactivity disorder (ADHD); and psychiatric comorbidities in adolescents with borderline personality disorder.

Increasing evidence indicates that the youngest children in a school cohort may have more problems than their older classmates, such as lower academic performance and higher rate of diagnosis of ADHD. Berg and Berg investigated whether the youngest children in a school cohort were more likely to be referred for mental health services than the older children. Included in the data set were 9,157 children who were referred to child and adolescent mental health services in 3 London boroughs. Children who were the youngest in their cohort were overrepresented in referrals to mental health services compared to children who were the oldest in their cohort; this occurred for children in both primary and secondary school. The association of younger relative age and referral to mental health services was even more pronounced for boys than for girls. The authors calculate that if every child had been the oldest in their class, referrals to child and adolescent mental health services would be reduced by 8%. The investigators encourage clinicians to consider relative age in the assessment and treatment of children and adolescents with mental health problems.

Neurofeedback is an intervention aimed at improving neurocognitive functioning in children with ADHD. Children with ADHD have been shown to have increased theta activity and decreased beta activity compared to children without ADHD. Neurofeedback typically consists of theta/beta training with the goal of decreasing theta and increasing beta or sensorimotor rhythm (SMR). Bink and colleagues conducted a multicenter parallel-randomized controlled trial to determine whether the addition of neurofeedback improved neurocognitive functioning compared to treatment as usual (TAU). Ninety male adolescents and young adults ages 12–24 years with a diagnosis of ADHD were randomly assigned to either TAU (n = 31) or TAU plus neurofeedback (n = 59). TAU included medication treatment and/or behavioral interventions. Neurofeedback training consisted of theta/SMR training on the vertex for approximately 37 sessions over 25 weeks. The sample included in the analyses consisted of those subjects who completed the protocol (TAU group n = 26 and neurofeedback plus TAU n = 45). Attrition rates were similar in both groups. Neurocognitive outcome measures included behavioral, neurocognitive, and electrophysiologic assessments. Improvements in neurocognitive measures of attention and/or motor skills were found for the neurofeedback plus TAU and TAU groups. Parent and self-report behavioral measures showed large improvements in both groups. The authors conclude that there is no added benefit of neurofeedback to improve neurocognitive functioning compared to TAU in adolescents and young adults with ADHD. However, these results cannot be generalized to children with ADHD or to females with ADHD, since the study was limited to males ages 12–24 years with ADHD.

Psychiatric comorbidity is common in adults with borderline personality disorder (BPD). In an online offering, Ha and colleagues assessed psychiatric comorbidity in adolescents with BPD to determine if they have a high rate of psychiatric comorbidity. These investigators were also interested in complex comorbidity, defined as any mood or anxiety disorder in combination with a disorder of impulsivity such as oppositional defiant disorder, conduct disorder,

or ADHD. Three hundred thirty-five adolescents ages 12–17 years on an inpatient unit were administered a structured interview (the NIMH Diagnostic Interview Schedule for Children), the Childhood Interview for *DSM-IV* Borderline Personality Disorder, and parent report and adolescent self-report assessing psychiatric problems and substance abuse. Thirty-three percent ($n = 110$) of adolescent inpatients met the criteria for diagnosis of BPD. Compared to psychiatric subjects without BPD, adolescents with BPD were significantly more likely to be female; to have a comorbid diagnosis of mood, anxiety, and externalizing disorders; and to have substance-related problems. Importantly, adolescents with BPD were significantly more likely to have complex comorbidity (mood or anxiety disorder in combination with a disorder of impulsivity) than patients without BPD (56.9%

vs 27.1%). These authors conclude that there is extensive psychiatric comorbidity in adolescents with BPD similar to that previously reported in adults. The investigators also note that complex comorbidity that includes internalizing and externalizing disorders may be indicative of underlying borderline psychopathology. They recommend that clinicians thoroughly assess comorbidity in adolescents for potential early identification of BPD.

We hope you enjoy this month's Focus on Childhood and Adolescent Mental Health offerings.

Karen Dineen Wagner, MD, PhD

kwagner@psychiatrist.com

J Clin Psychiatry 2014;75(5):528–529 (doi:10.4088/JCP.14f09104).

© Copyright 2014 Physicians Postgraduate Press, Inc.