

## Continuing Medical Education

You now have an opportunity to earn CME credits by reading articles in *The American Journal of Psychiatry*. Three articles in this issue each comprise a short course for up to 1 AMA PRA Category 1 Credit™ each. The course consists of reading the article and answering three multiple-choice questions with a single correct answer. CME credit is issued only online. Readers who want credit must subscribe to the AJP Continuing Medical Education Course Program ([cme.psychiatryonline.org](http://cme.psychiatryonline.org)), select *The American Journal of Psychiatry* at that site, take the course(s) of their choosing, complete the evaluation form, and submit their answers for CME credit. There is no minimum threshold score necessary for the credit. A link from the question to the correct answer in context will be highlighted in the associated article. A certificate for each course will be generated upon successful completion. This activity is sponsored by the American Psychiatric Association.

### Information to Participants

**Objectives.** After evaluating a specific journal article, participants should be able to demonstrate an increase in their knowledge of clinical medicine. Participants should be able to understand the contents of a selected research or review article and to apply the new findings to their clinical practice.

**Participants.** This program is designed for all psychiatrists in clinical practice, residents in Graduate Medical Education programs, medical students interested in psychiatry, and other physicians who wish to advance their current knowledge of clinical medicine.

**Explanation of How Physicians Can Participate and Earn Credit.** In order to earn CME credit, subscribers should read through the material presented in the article. After reading the article, complete the CME quiz online at [cme.psychiatryonline.org](http://cme.psychiatryonline.org) and submit your evaluation and study hours (up to 1 AMA PRA Category 1 Credit™).

**Credits.** The American Psychiatric Association designates this educational activity for a maximum of 1 AMA PRA Category 1 Credit™. Physicians should only claim credit commensurate with the extent of their participation in the activity. The American Psychiatric Association is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

### Information on Courses

**Title:** Relationship of Personality Disorders to the Course of Major Depressive Disorder in a Nationally Representative Sample

**Faculty:** Andrew E. Skodol, M.D., Carlos M. Grilo, Ph.D., Katherine M. Keyes, M.P.H., Ph.D., Timothy Geier, B.A., Bridget F. Grant, Ph.D., Ph.D., Deborah S. Hasin, Ph.D.

**Affiliations:** New York State Psychiatric Institute (A.E.S., T.G., D.S.H.); Yale Psychiatric Research Institute (C.M.G.); Columbia University (K.M.K., D.S.H.); National Institute on Alcohol Abuse and Alcoholism (B.F.G.)

**Disclosures:** All authors report no financial relationships with commercial interests.

**Discussion of unapproved or investigational use of products\***: No

**Title:** Abnormal Modulation of Amygdala Activity in Schizophrenia in Response to Direct- and Averted-Gaze Threat-Related Facial Expressions

**Faculty:** Amy E. Pinkham, Ph.D., James Loughead, Ph.D., Kosha Ruparel, M.S.E., Eve Overton, B.A., Raquel E. Gur, M.D., Ph.D., Ruben C. Gur, Ph.D.

**Affiliations:** Department of Psychology, Southern Methodist University (A.E.P.); Department of Psychiatry, Neuropsychiatry Section, University of Pennsylvania School of Medicine (J.L., K.R., E.O., R.E.G., R.C.G.)

**Disclosures:** All authors report no financial relationships with commercial interests

**Discussion of unapproved or investigational use of products\***: No

**Title:** Overactive Error-Related Brain Activity as a Candidate Endophenotype for Obsessive-Compulsive Disorder: Evidence From Unaffected First-Degree Relatives

**Faculty:** Anja Riesel, Dipl.-Psych., Tanja Endrass, Ph.D., Christian Kaufmann, Dipl.-Psych., Norbert Kathmann, Ph.D.

**Affiliations:** Department of Psychology, Humboldt-Universität zu Berlin, Berlin

**Disclosures:** Ms. Riesel has received funding from a predoctoral fellowship, the Else-Neumann-Scholarship, which did not influence the conduction or publication of this study. Dr. Endrass, Mr. Kaufmann, and Dr. Kathmann report no financial relationships with commercial interests.

**Discussion of unapproved or investigational use of products\***: No

\* APA policy requires disclosure by CME authors of unapproved or investigational use of products discussed in CME programs. Off-label use of medications by individual physicians is permitted and common. Decisions about off-label use can be guided by scientific literature and clinical experience.

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**Estimated Time to Complete: 1 Hour**

Begin date March 1, 2011 – End date February 28, 2013

## EXAMINATION QUESTIONS

Select the single best answer for each question below.

### Relationship of Personality Disorders to the Course of Major Depressive Disorder in a Nationally Representative Sample

Andrew E. Skodol et al.

Am J Psychiatry 2011; 168:257–264

**Learning Objective.** The participant will appreciate the prognostic effects of personality disorders on the persistence of major depressive disorder, relative to other potential predictors of prognosis.

**Subject Node.** Mood Disorders, Borderline Personality Disorder

1. Which of the following comorbid axis I disorders was the most significant predictor of the persistence of major depressive disorder?
- A. Specific phobia
  - B. Alcohol dependence
  - C. Dysthymic disorder
  - D. Panic disorder

2. To test the specific effects of each individual DSM-IV personality disorder on the persistence of major depressive disorder, the effects of which of the following predictors were controlled?
- A. Demographic characteristics and comorbid axis I and axis II disorders
  - B. Family history of depression
  - C. Age at onset of depression, number of lifetime episodes, duration of most recent episode, and current treatment
  - D. All of the above

3. Of the 10 DSM-IV personality disorders, which one was the strongest predictor of the persistence of major depressive disorder over three years?
- A. Schizoid personality disorder
  - B. Schizotypal personality disorder
  - C. Borderline personality disorder
  - D. Histrionic personality disorder

## EVALUATION QUESTIONS

This evaluation form is adapted from the MedBiquitous Journal-Based Continuing Education Guidelines 28 November 2005.

This evaluation will appear online at the end of each CME course. Participants must complete this evaluation in order to receive credit. Select the response which best indicates your reaction to the following statements about this activity.

**STATEMENT 1.** The activity achieved its stated objectives.

- 1. Strongly agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly disagree

**STATEMENT 2.** The activity was relevant to my practice.

- 1. Strongly agree
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- 5. Strongly disagree

**STATEMENT 3.** I plan to change my current practice based on what I learned in the activity.

- 1. Strongly agree
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**STATEMENT 4.** The activity validated my current practice.

- 1. Strongly agree
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- 5. Strongly disagree

**STATEMENT 5.** The activity provided sufficient scientific evidence to support the content presented.

- 1. Strongly agree
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**STATEMENT 6.** The activity was free of commercial bias toward a particular product or company.

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### Abnormal Modulation of Amygdala Activity in Schizophrenia in Response to Direct- and Averted-Gaze Threat-Related Facial Expressions

Amy E. Pinkham et al.

Am J Psychiatry 2011; 168:293–301

**Learning Objective.** The participant will recognize a potential neural basis for impaired emotion processing and functioning in schizophrenia.  
**Subject Node.** Schizophrenia and Other Psychotic Disorders, Brain Imaging

1. Despite showing a similar effect of gaze direction and emotion on recognition accuracy, patients with schizophrenia showed abnormal amygdala activation that was different from the healthy comparison group in which of the following ways?

- A. Reduced amygdala activation in response to each condition of stimuli
- B. Reduced amygdala activation with only direct-gaze anger expressions but comparable levels of activation for all other conditions
- C. Greater amygdala activation in response to each condition of stimuli
- D. Greater amygdala responses with all angry expressions regardless of gaze direction

2. Within the patient group, the degree of amygdala activation in response to direct-gaze anger expressions was significantly associated with level of functioning and symptom ratings such that:

- A. Greater amygdala activity was related to higher ratings of anhedonia.
- B. Reduced amygdala activity was related to better levels of functioning.
- C. Reduced amygdala activity was related to lower levels of functioning, but this relationship was not significant after controlling for medication.
- D. Greater amygdala activity was related to lower ratings of anhedonia and higher levels of functioning.

3. The primary study finding of abnormal amygdala responses in patients with schizophrenia helps to illustrate which of the following aspects of the illness?

- A. A potential neural basis for impaired emotion processing and functioning in schizophrenia
- B. A generalized pattern suggesting that amygdala hypoactivation accounts for impaired processing of all emotional stimuli
- C. Specific impairments in the processing of averted-gaze fear expressions that can be explained by a lack of amygdala activation in schizophrenia
- D. Individuals with schizophrenia may retain an intact ability to accurately assess self-relevant threat

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#### Overactive Error-Related Brain Activity as a Candidate Endophenotype for Obsessive-Compulsive Disorder: Evidence From Unaffected First-Degree Relatives

Anja Riesel et al.

Am J Psychiatry 2011; 168:317–324

**Learning Objective.** The participant will understand the concept of an endophenotype and how error-related brain activity may be a candidate endophenotype for obsessive-compulsive disorder.

**Subject Node.** Obsessive-Compulsive Disorders, Genetics

1. What is the range of heritability for OCD as revealed by twin studies?

- A. Between 20–40% for adult and pediatric OCD.
- B. Between 45–65% for adult OCD patients and between 27–47% for children.
- C. Between 45–65% for children and between 27–47% for adult OCD patients.
- D. Between 60–80% for adult and pediatric OCD.

2. Which criteria according to Gottesman and Gould should endophenotypes fulfill?

- A. Associated with the illness, heritable, and state-independent, and should cosegregate within families and present in unaffected family members
- B. Associated with the illness and specific for it, independent from symptom state
- C. Biological markers that mediate between genes and clinical phenotype on the causal pathway and are only observable in affected individuals
- D. Heritable, independent from environmental variables and vary with symptom state

3. Which of the following supports the conclusion that enhanced error-related brain activity may represent an endophenotype for OCD?

- A. Unaffected relatives show enhanced response-related negativities similar to those of OCD patients.
- B. Unaffected family members of OCD patients show enhanced error-related negativity amplitudes relative to healthy comparison subjects.
- C. Unaffected family members with enhanced error-related negativity amplitudes did not show OCD symptoms and were free of psychotropic medications.
- D. All of the above

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