Dan Klein

# PSY 596 - PSYCHOPATHOLOGY II: Externalizing and Psychotic Disorders Spring, 2020

The goal of this class is to familiarize you with current concepts and research on youth and adult psychopathology. The class meets on Thursdays from 1:00-2:50 in Psych B 316.

This is the second semester of a two-semester sequence. During the previous semester, we covered conceptual models and methods and the internalizing disorders (mood and anxiety disorders). This semester, we will deal with externalizing, personality, and psychotic disorders.

Class meetings will consist of lectures designed to provide a broad overview of the topic for that class and discussion. Typically, we will cover diagnosis and classification, epidemiology, course, and the genetic, neurobiological, and psychosocial factors implicated in the etiopathogenesis and maintenance of the disorder. We will not discuss treatment, as that is the focus of other courses.

The required readings, listed below, will generally consist of six papers per week. Please make the time to read each of the assigned articles. Some of the readings will be difficult, so don't be discouraged if you have to struggle with them. Focus on the main questions, findings, and implications of the papers, and don't worry if you cannot grasp the more technical details. All of the journal articles are available in the campus library electronic journal collections; I will provide copies of book chapters. You may find it helpful to read the relevant sections from the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (DSM-5), although I am not assigning it.

Class requirements will include two non-cumulative exams and three "thought papers". The exams are intended primarily to help you keep up with and absorb the material. They will consist of short answer questions covering both the lectures and readings.

The thought papers should be relatively brief (2-4 pages double-spaced). The purpose of these papers is to encourage you to think critically and actively about the assigned readings and to formulate reactions to them as you read them. The thought papers can take many forms, including critiquing or challenging the argument made by an author, discussing some of the assigned readings in relation to other readings assigned in a previous week, integrating ideas across readings, identifying and evaluating unexpressed assumptions in a reading, or exploring the research implications of particular ideas. The thought papers should NOT be summaries of the readings or reviews of the literature. I will be looking for creativity and the ability to develop and support a line of argument.

Exams will count for 50% of your grade; thoughts papers for the other 50% of your grade.

Please feel free to talk with me about any issues regarding the format, content, or process of the

course. My office hours are Tuesday 3:00-3:50; Wednesday 11:30-12:20; and Thursday 3:00-3:50. You can also email me at <u>daniel.klein@stonybrook.edu</u>.

# Learning Objectives

1. Identify the key clinical and diagnostic features of the externalizing, personality, and psychotic disorders in youth and adults.

2. Become familiar with the current literature on the epidemiology, course, and etiopathogenesis of the eating disorders, childhood disruptive behavior disorders, attention deficit hyperactivity disorder, personality disorders, substance use disorders, schizophrenia-related disorders, and autism spectrum disorders.

These objectives will be assessed in the mid-term and final exams and the three thought papers described above.

## January 30: Eating Disorders: Anorexia and Bulimia Nervosa

- (a) Phenomenology, classification, and comorbidity
- (b) Epidemiology and sociocultural factors
- (c) Course and prognosis
- (d) Research on hypothesized etiological factors (e.g., dieting, internalization of the thin ideal, body dissatisfaction, personality)
- (e) Family systems perspectives and early adversity
- (f) Genetics and neurobiology
- Keel, P. K., Brown, T. A., Holland, L. A., & Bodell, L. P. (2012). Empirical classification of eating disorders. *Annual Review of Clinical Psychology*, *8*, 381-404.
- Farstad, S. M., McGeown, L. M., & von Ranson, K. M. (2016). Eating disorders and personality, 2004–2016: A systematic review and meta-analysis. *Clinical Psychology Review*, 46, 91-105.
- Steinhausen, H. C., Jakobsen, H., Helenius, D., Munk-Jørgensen, P., & Strober, M. (2015). A nation-wide study of the family aggregation and risk factors in anorexia nervosa over three generations. *International Journal of Eating Disorders*, 48, 1-8.
- Stice, E., & van Ryzen, M.J. (2019). A prospective test of the temporal sequencing of risk factor emergence of the dual pathway model of eating disorders. *Journal of Abnormal Psychology*. http://dx.doi.org/10.1037/abn0000400
- Culbert, K.M., Racine, S.E., & Klump, K.L. (2015). Research review: What we have learned about the causes of eating disorders a synthesis of sociocultural, psychological, and biological research. *Journal of Child Psychology and Psychiatry*, *56*, 1151-1164.

## February 6: Attention-Deficit Hyperactivity Disorder

- (a) Classification
- (b) Epidemiology
- (c) Development, course, and complications
- (d) Genetics
- (e) Neuropsychology, neuroimaging, and neurotransmitters

- (f) Environmental risk factors
- Wilcutt, E.G., Nigg, J.T., Pennington, B., Solanto, M.V., Rohde, L.A., Tannock, R., ... Lahey, B.B. (2012). Validity of DSM-IV attention deficit/hyperactivity disorder symptom dimensions and subtypes. *Journal of Abnormal Psychology*, *121*, 991-1010.
- Asherson, P., & Agnew-Blais, J. (2019). Annual Research Review: Does late-onset attention-deficit/hyperactivity disorder exist?. *Journal of Child Psychology and Psychiatry*, 60(4), 333-352.
- Faraone, S. V., & Larsson, H. (2019). Genetics of attention deficit hyperactivity disorder. *Molecular Psychiatry*, 24(4), 562-575.
- Seidman, L.J. (2006). Neuropsychological functioning in people with ADHD across the lifespan. *Clinical Psychology Review*, *26*, 466-485.
- Shaw, P., Malek, M., Watson, B., Greenstein, D., de Rossi, P., & Sharp, W. (2013). Trajectories of cerebral cortical development in childhood and adolescence and adult Attention-Deficit/Hyperactivity Disorder. *Biological Psychiatry*, 74, 599–606.
- Servera, M., Sáez, B., Burns, G. L., & Becker, S. P. (2018). Clinical differentiation of sluggish cognitive tempo and attention-deficit/hyperactivity disorder in children. *Journal of Abnormal Psychology*, 127(8), 818-829.

### February 13: Oppositional Defiant and Conduct Disorder

- (a) Classification, subtypes of CD, and comorbidity
- (b) Epidemiology and sex differences
- (c) Development and course (e.g., child versus adolescent onset subtypes; developmental trajectories from ODD to CD, and from CD to Antisocial Personality)
- (d) Comorbidity
- (e) Genetics
- (f) Neurocognitive factors
- (g) Social cognitive models
- (e) Neurobiology
- (f) Prenatal and family environment
- (g) Peer and broader contextual influences
- Wakschlag, L.S., Tolan, P.H., & Leventhal, B.L. (2010). Research review: 'Ain't misbehavin': Towards a developmentally-specified nosology for preschool disruptive behavior. *Journal of Child Psychology and Psychiatry*, 51, 3-22.
- Stringaris, A., & Goodman, R. (2009). Longitudinal outcome of youth oppositionality: Irritable, headstrong, and hurtful behaviors have different predictions. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 404-412.
- Burke, J.D., Waldman, I., & Lahey, B.B. (2010). Predictive validity of childhood oppositional defiant disorder and conduct disorder: Implications for the DSM-V. *Journal of Abnormal*

Psychology, 119, 739-751.

- Frick, P.J., Ray, J.V., Thornton, L.C., & Kahn, R.E. (2014). Annual research review: A developmental psychopathology approach to understanding callous-unemotional traits in children and adolescents with serious conduct problems. *Journal of Child Psychology* and Psychiatry, 52, 532-548.
- Alegria, A. A., Radua, J., & Rubia, K. (2016). Meta-analysis of fMRI studies of disruptive behavior disorders. *American Journal of Psychiatry*, *173*(11), 1119-1130.
- Beauchaine, T. P., Zisner, A. R., & Sauder, C. L. (2017). Trait impulsivity and the externalizing spectrum. *Annual Review of Clinical Psychology*, *13*, 343-368.

## First thought paper due

### February 20: Personality Disorders: Diagnosis and classification

- (a) The specific PDs and the PD clusters
- (b) The Axis I-Axis II distinction
- (c) Comorbidity, convergent validity, stability, prognostic utility
- (d) Validity of diagnosing personality disorders in children and adolescents
- (e) The case for dimensional classification
- (f) Alternative classification systems
- Zachar, P., Krueger, R. F., & Kendler, K. S. (2016). Personality disorder in DSM-5: An oral history. *Psychological Medicine*, *46*(1), 1-10.
- Morey, L.C., & Hopwood, C.J. (2013). Stability and change in personality disorders. *Annual Review of Clinical Psychology*, *9*, 499-528.
- Morey, L.C., Hopwood, C.J., Markowitz, J.C., Gunderson, J.G., Grilo, C.M., McGlashan, T.H., et al. (2012). Comparison of alternative models for personality disorders, II: 6-, 8-, and 10-year follow-up. *Psychological Medicine*,42, 17-5-1713.
- Westen, D., Shedler, J., Bradley, B., & DeFife, J.A. (2012). An empirically derived taxonomy for personality diagnosis: Bridging science and practice in conceptualizing personality. *American Journal of Psychiatry*, 169, 273-284.
- Krueger, R.F., & Markon, K.E. (2014). The role of the DSM-5 personality trait model in moving toward a quantitative and empirically based approach of classifying personality and psychopathology. *Annual Review of Clinical Psychology*, *10*, 477-501.
- Wright, A. G., Hopwood, C. J., Skodol, A. E., & Morey, L. C. (2016). Longitudinal validation of general and specific structural features of personality pathology. *Journal of Abnormal Psychology*, 125(8), 1120-1134.

February 27: Class is cancelled

## <u>March 5: Antisocial Personality Disorder, Psychopathy, and Intermittent Explosive</u> <u>Disorder</u>

(a) Classification and nosological controversies

(b) Epidemiology

- (c) Antecedents, development and course
- (d) Genetics
- (e) Neuropsychological deficits (e.g, executive functioning)
- (e) Fear-conditioning, insensitivity to punishment, and response modulation theories
- (f) Affective processing deficits
- (g) Intermittent Explosive Disorder
- Fowles, D.C., & Dino, L. (2009). Temperament and psychopathy: A dual-pathway model. *Current Directions in Psychological Science, 18*, 179-183.
- Sleep, C. E., Weiss, B., Lynam, D. R., & Miller, J. D. (2019). An examination of the Triarchic Model of psychopathy's nomological network: A meta-analytic review. *Clinical Psychology Review*, 71, 1-26.
- Smith, S. F., & Lilienfeld, S. O. (2015). The response modulation hypothesis of psychopathy: A meta-analytic and narrative analysis. *Psychological Bulletin*, *141*, 1145-1177.
- Venables, N. C., Hall, J. R., Yancey, J. R., & Patrick, C. J. (2015). Factors of psychopathy and electrocortical response to emotional pictures: Further evidence for a two-process theory. *Journal of Abnormal Psychology*, 124(2), 319-328.
- Raine, A. (2018). Antisocial personality as a neurodevelopmental disorder. *Annual Review of Clinical Psychology*, 14, 259-289.
- Coccaro, E.F. (2012). Intermittent explosive disorder as a disorder of impulsive aggression for DSM-5. *American Journal of Psychiatry*, *169*, 577-588.

### March 12: Borderline Personality Disorder and Nonsuicidal Self-Injury

- (a) Phenomenology and classification
- (b) Course and prognosis
- (c) Nosological controversies
- (d) Theoretical perspectives
- (e) Childhood abuse and adversity
- (f) Neurobiology (biochemistry and structural and functional neuroanatomy)
- (g) Nonsuicidal self-injury
- Gunderson, J.G. (2009). Borderline personality disorder: Ontogeny of a diagnosis. *American Journal of Psychiatry*, 166, 530-539.
- Zanarini, M.C., Frankenburg, F.R., Reich, D.B., & Fitzmaurice, G. (2012). Attainment and stability of sustained symptomatic remission and recovery among patients with borderline personality disorder and Axis II comparison subjects: A 16-year prospective follow-up study. *American Journal of Psychiatry*, 169, 476-483.
- Sharp, C., & Fonagy, P. (2015). Practitioner Review: Borderline personality disorder in adolescence–recent conceptualization, intervention, and implications for clinical practice. *Journal of Child Psychology and Psychiatry*, 56(12), 1266-1288.
- Hallquist, M. N., Hipwell, A. E., & Stepp, S. D. (2015). Poor self-control and harsh punishment in childhood prospectively predict borderline personality symptoms in adolescent girls.

Journal of Abnormal Psychology, 124, 549-564.

- Bortolla, R., Cavicchioli, M., Fossati, A., & Maffei, C. (2018). Emotional reactivity in borderline personality disorder: theoretical considerations based on a meta-analytic review of laboratory studies. *Journal of Personality Disorders*, *32*, 1-24.
- Hooley, J. M., & Franklin, J. C. (2018). Why do people hurt themselves? A new conceptual model of nonsuicidal self-injury. *Clinical Psychological Science*, 6(3), 428-451.

#### March 19: No class - Spring Break

### <u>March 26: Mid-term exam</u> April 2: Alcohol and Drug Abuse/Dependence

- (a) The externalizing spectrum
- (b) Classification of substance use disorders
- (c) Alcoholism: Epidemiology
- (d) Alcoholism: Subtypes, developmental trajectories, and course
- (e) Alcoholism: Genetics
- (f) Etiology of alcoholism: Alcohol sensitivity, personality, expectancies, and stress dampening/self-medication
- (g) Drug use disorders: Developmental theories of initiation and escalation
- (h) Drug use disorders: Family, peer, and broader contextual influences
- (j)Learning models of substance abuse/dependence
- (k) Neurobiology of addiction
- Martin, C. S., Langenbucher, J. W., Chung, T., & Sher, K. J. (2014). Truth or consequences in the diagnosis of substance use disorders. *Addiction*, *109*(11), 1773-1778.
- Martins, S. S., Sarvet, A., Santaella-Tenorio, J., Saha, T., Grant, B. F., & Hasin, D. S. (2017). Changes in US lifetime heroin use and heroin use disorder: prevalence from the 2001-2002 to 2012-2013 National Epidemiologic Survey on Alcohol and Related Conditions. JAMA Psychiatry, 74(5), 445-455.
- Lee, M. R., Boness, C. L., McDowell, Y. E., Vergés, A., Steinley, D. L., & Sher, K. J. (2018). Desistance and Severity of Alcohol Use Disorder: A Lifespan-Developmental Investigation. *Clinical Psychological Science*, 6(1), 90-105.
- Kendler, K. S., Ji, J., Edwards, A. C., Ohlsson, H., Sundquist, J., & Sundquist, K. (2015). An extended Swedish national adoption study of alcohol use disorder. *JAMA Psychiatry*, 72, 211-218.
- Iacono, W.G., & Malone, S.M. (2011). Developmental endophenotypes: Indexing genetic risk for substance abuse with the P300 brain event-related potential. *Child Development Perspectives*, 5, 239-247.
- Ray, L.A. (2012). Clinical neuroscience of addiction: Applications to psychological science and practice. *Clinical Psychology: Science and Practice*, *19*, 154-166.

## Second thought paper due

April 9: Autism Spectrum Disorders - Cara Keiffer will guest-lecture

Klin, A., Lin, D. J., Gorrindo, P., Ramsay, G., & Jones, W. (2009). Two-year-olds with autism orient to non-social contingencies rather than biological motion. *Nature*, *459*(7244), 257-261. doi: 10.1038/nature07868.

Lord, C. (2010). Autism Spectrum Disorders: from research to practice. *American Psychologist*, 65(8), 815-826.

Mendelson, J.L., Gates, J.A., & Lerner, M.D. (2016). Friendship in school-age boys with autism spectrum disorders: a meta-analytic summary and developmental, process-based model. *Psychological Bulletin*, *142*, 601-622. Doi: 10.1037/bul0000041.

Smith, T., & Iadarola, S. (2015). Evidence Base Update for Autism Spectrum Disorder. *Journal of Clinical Child & Adolescent Psychology*, 44(6), 897-922.

Lai, MC, Lombardo, MV, Baron-Cohen, S. (2014) Autism. *Lancet*, 383, 986-910. doi: 10.1016/S0140-6736(13)61539-1.

Wakefield, A. J., Murch, S. H., Anthony, A., Linnell, J., Casson, D. M., Malik, M., et al. (1998). RETRACTED: Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *The Lancet*, 351, 637-641.

The Editors of The Lancet. (2010) Retraction--Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *The Lancet*, 375, 445-445.

## April 16: Schizophrenia: Clinical, epidemiological, and developmental aspects

- (a) Classification (Kraepelin, Bleuler, and Schneder; schizoaffective and schizophreniform; positive, negative, and disorganized symptoms; the schizophrenia spectrum)
- (b) Course and prognosis
- (c) Childhood schizophrenia and schizophrenia in the elderly
- (d) Epidemiology (including selection vs drift; season of birth; and other epidemiological risk factors such as urban residence and paternal age)
- (e) Neurodevelopmental perspective (behavioral precursors; pregnancy and birth complications; the neurodevelopment vs neurodegeneration debate)
- Bromet, E.J., Kotov, R., Fochtmann, L.J., Carlson, G.A., Tanenberg-Karant, M., Ruggero, C., et al. (2011). Diagnostic shifts during the decade following fist admission for psychosis. *American Journal of Psychiatry*, *168*, 1186-1194.
- Kotov, R., Leong, S. H., Mojtabai, R., Erlanger, A. C. E., Fochtmann, L. J., Constantino, E., ... & Bromet, E. J. (2013). Boundaries of schizoaffective disorder: revisiting Kraepelin. JAMA Psychiatry, 70(12), 1276-1286.
- Fusar-Poli, P., Carpenter, W. T., Woods, S. W., & McGlashan, T. H. (2014). Attenuated psychosis syndrome: ready for DSM-5.1? *Annual Review of Clinical Psychology*, 10, 155-192.
- Owen, M.J., O'Donovan, M.C., Thapar, A., & Craddock, N. (2011). Neurodevelopmental hypothesis of schizophrenia. *British Journal of Psychiatry*, 198, 173-175.
- Lee, Y. H., Cherkerzian, S., Seidman, L. J., Papandonatos, G. D., Savitz, D. A., Tsuang, M. T., ... & Buka, S. L. (2019). Maternal bacterial infection during pregnancy and offspring risk of psychotic disorders: Variation by severity of infection and offspring sex. *American*

Journal of Psychiatry. Published Online: <u>https://doi.org/10.1176/appi.ajp.2019.18101206</u>
Mollon, J., David, A. S., Zammit, S., Lewis, G., & Reichenberg, A. (2018). Course of cognitive development from infancy to early adulthood in the psychosis spectrum. JAMA Psychiatry, 75(3), 270-279.

### April 23: Schizophrenia: Genetics and neurobiology

- (a) Population and molecular genetics
- (b) Neurochemistry
- (c) Structural neuroanatomy
- (d) Functional neuroanatomy
- Gejman, P.V., Sanders, A.R., & Kendler, K.S. (2011). Genetics of schizophrenia: new Findings and challenges. *Annual Review of Genomics and Human Genetics*, 12, 121-144.
- Zheutlin, A. B., Dennis, J., Karlsson Linnér, R., Moscati, A., Restrepo, N., Straub, P., ... & Huckins, L. M. (2019). Penetrance and pleiotropy of polygenic risk scores for schizophrenia in 106,160 patients across four health care systems. *American Journal of Psychiatry*, 176(10), 846-855.
- Weinberger, D. R. (2019). Thinking about schizophrenia in an era of genomic medicine. *American Journal of Psychiatry*, 176(1), 12-20.
- Cropley, V. L., Klauser, P., Lenroot, R. K., Bruggemann, J., Sundram, S., Bousman, C., ... & Pantelis, C. (2016). Accelerated gray and white matter deterioration with age in schizophrenia. *American Journal of Psychiatry*, 174(3), 286-295.
- Howes, O.D., Kambeitz, J., Kim, E., Stahl, D., Slifstein, M., Abi-Dargham, A., & Kapur, S. (2012). The nature of dopamine dysfunction in schizophrenia and what this means for treatment: Meta-analysis of imaging studies. *Archives of General Psychiatry*, 69, 776-786.
- Clementz, B. A., Sweeney, J. A., Hamm, J. P., Ivleva, E. I., Ethridge, L. E., Pearlson, G. D., ... & Tamminga, C. A. (2016). Identification of distinct psychosis biotypes using brain-based biomarkers. *American Journal of Psychiatry*, 173, 373-384.

### April 30: Schizophrenia: Neurocognition, electrophysiology, and the social environment

- (a) Potential neurophysiological endophenotypes (e.g., sensory gating, eye tracking)
- (b) Potential neurocognitive endophenotypes (e.g., attention, working memory)
- (c) Prognostic significance of neurocognition
- (d) Life stress
- (e) Expressed emotion
- Kahn, R.S., & Keefe, R.E. (2013). Schizophrenia is a cognitive illness: Time for a change in focus. *JAMA Psychiatry*, 70, 1107-1112.
- Barch, D.M., & Ceaser, A. (2012). Cognition in schizophrenia: Core psychological and neural mechanisms. *Trends in Cognitive Sciences*, *16*, 27-34.
- Seidman, L. J., Shapiro, D. I., Stone, W. S., Woodberry, K. A., Ronzio, A., Cornblatt, B. A., ... &

Mathalon, D. H. (2016). Association of neurocognition with transition to psychosis: baseline functioning in the second phase of the North American Prodrome Longitudinal Study. *JAMA Psychiatry*, *73*, 1239-1248.

- Green, M.F., Horan, W.P., & Lee, J. (2015). Social cognition in schizophrenia. *Nature Reviews Neuroscience*, 16, 620-631.
- Kring, A. M., & Elis, O. (2013). Emotion deficits in people with schizophrenia. *Annual Review* of Clinical Psychology, 9, 409-433.
- Hooley, J.M. (2007). Expressed emotion and relapse of psychopathology. *Annual Review of Clinical Psychology*, *3*, 329-352.

# May 7: TBA

## Third thought paper due

Final Exam - finals week, at time to be determined later.