PSY610-08: Autism Spectrum Disorders: From Diagnosis to Treatment
Meeting time: Tuesday/Thursday: 2:30 – 3:50 PM
Location: Psychology B-316

Instructor: Matthew D. Lerner, PhD
Office: Psychology B-354
Office Hours: by appointment
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Pre-Requisites: N/A (Graduate-Only course)

Course Description & Goals
This course is designed as a discussion of current research into the causes (etiology), types (nosology), characteristics (symptomatology), and treatment of autism spectrum disorders (ASDs). ASDs are now considered to be among the most common developmental psychological disorders, with recent prevalence estimates exceeding 1 in 68 (Centers for Disease Control, 2014). They are also among the least understood, with increasingly frequent media reports and publicity efforts often focusing on folk treatments, anecdotal evidence, and other non-empirical data on ASDs. This trend warrants a focus on the rapidly-growing body of research into understanding the cause, correlates, and treatment of ASDs. The primary goal of this course is to provide an introduction to the field of contemporary empirical research on ASDs. We will begin the course by exploring the history and current status of ASDs. We will then explore the many characteristics (neurobiological, behavioral, cognitive, and social) associated with ASDs, and theories of ASD cause and course. Finally, we will explore the array of current empirically-supported treatments for ASDs, and consider future directions for intervention research. In addition, this course will emphasize the importance of engaging in critical, independent thinking and thoughtful discussion regarding contemporary research and modern news stories in this area. Relatedly, while this course is pan-theoretical and -methodological, (i.e. designed to acquaint students with a variety of theories and approaches), we will largely draw upon the fields of developmental psychopathology, social cognition, and social neuroscience to explore the many facets of ASDs.

The course goals, to be achieved through course readings, assignments, and participation, are as follows. Students will:
1. Develop a basic understanding of the history and current empirical status of ASDs.
2. Identify current controversies in the public domain related to ASDs.
   a. Become a more critical consumer of psychological science by critically evaluating these controversies in light of current research.
3. Distinguish the clinical characteristics associated with ASDs, including any presentation unique to ASDs.
   a. Appraise the interplay between characteristics and their resulting impact on daily and longitudinal functioning in individuals with ASDs.
4. Gain awareness of how psychologists and other professionals work with individuals with ASDs and their families.
   a. Begin to understand the concept of evidence-based clinical practice by appraising the empirical status of such treatments.
**Weekly Questions and Participation**
Each student is responsible for completing the weekly readings, and for submitting two discussion questions each week pertaining to them. The discussion questions should be sent by Monday at 5pm, prior to the relevant Tuesday class. These discussion questions should aim to facilitate thoughtful discussion and critical evaluation of the week’s readings. **Each student is expected to participate in the discussion, and participation points will count for 25% of the final course grade.**

**Presentations**
Each 2-person student group is expected to choose 2 “presentation weeks,” designated in the syllabus, in which to present the assigned readings via PowerPoint. The team of presenters should also present one related contemporary news story of their choice. Each presentation should provide a summary of each research article, and should uniquely identify strengths and weaknesses (i.e., not strengths and weaknesses that are already mentioned in the article). Each presenter should also identify potential future directions, and clinical implications of the article. Individuals are encouraged to use other media materials to give your presentation some pizzazz, but this is not required. **Presentations count for 25% of your final grade.**

**Paper Proposal**
Each student will write a 2-3 page proposal outlining the topic, the basic structure of the paper (e.g., which arguments you will consider), and noting why this topic is significant to the field of clinical science. This outline will be **due at the 10/6 class meeting.** Paper proposals will be evaluated based upon the student’s ability to critically evaluate the research literature and develop a novel topic for inquiry. **Paper proposals count for 15% of the final course grade.**

**Final Paper: Research Proposal or Critical Review Paper**

**Research Proposal**
Write a research proposal designed to answer three hypotheses that you are interested in investigating within the realm of ASDs. Your research proposal should focus on developing a background that is grounded in the existing literature. Hypotheses should strike a balance between being innovative and unique, yet feasible with strong empirical evidence to support them. Research Proposals should be at least 15 pages and will be evaluated based upon the strength of supporting arguments and methods and effective recruitment of evidence from the literature.

**Critical Review Paper**
Each student will write a paper (15-20 pages) on a topic of controversy pertaining to ASDs. Sample topics include but are not limited to:

- Discuss the controversy surrounding the increased prevalence of ASDs, addressing either the plausibility of the claim that there is a true increase, the possible causes of such an increase, or both.
- Discuss the “vaccine controversy,” focusing on its relevance to broader questions (e.g. correlation = causation?) of scientific inquiry.
- Discuss the change in diagnostic criteria for autism over time, attending to the current debate and potential consequences regarding changes in criteria with the release of the DSM-V.
- Choose a popular treatment for ASDs and present its theoretical rationale, history, and empirical status, with an eye towards advancing a position on whether the treatment should or should not be practiced.
Final Papers & Research Proposals are due at the final class (12/3) and count for 35% of your final grade.

Course Grade:
Final grades will be determined on the following basis:
1. Attendance & Participation: 25%
2. Paper Proposal: 15%
3. Presentations: 25%
4. Final Paper/Research Proposal: 35%

Required Books

Books that are good additions to your personal library (but not required):


**PART I: DIAGNOSIS**

**WEEK 1 (8/25 & 8/27): Definition & Introduction**

**Overriding questions/Key ideas:**
- Why is autism a worthwhile topic to study?
- What do you hope to get out of this class?
- What can the research literature contribute to families, practitioners, and policymakers addressing the needs of individuals with ASDs?

**Thought Questions:**
- What led you to take this class?
- What do you already know about people with autism?


Optional/For your reference:

WEEK 2 (9/1 & 9/3): Diagnosis 1 – Classic Autism, Fragile X, Rett’s, CDD

Overriding questions/Key ideas:
What unique diagnostic issues arise in autism?
What are the best methods for diagnosis? What methods are sufficient?
When does autism tend to appear in other (genetic) disorders?
What can autism diagnosis tell you about diagnoses of other childhood disorders? What can’t it tell you?

Thought Question: How does classic autism differ from mental retardation?


Optional/For your reference:


**WEEK 3 (9/8 & 9/10): Diagnosis 2 – High Functioning Autism, Asperger’s Syndrome, & Differential Diagnosis**

***************NO CLASS ON 9/8***************

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**Overriding questions/Key ideas:**
- Is Asperger’s Syndrome diagnostically unique?
- Do you agree with the high/low functioning distinctions? When? When not?
- Are there other disorders you would consider as part of the autism spectrum? Why?
- Can one be “cured” or “grow” out of autism? Is the answer to this question different than for other disorders? Why or why not?

**Thought Question:** How similar do you think HFA/AS are to classic autism? To each other?

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9/10: GUEST SPEAKER Zonya Mitchell, PhD


Optional/For your reference:


PART II: A DEEPER UNDERSTANDING

WEEK 4 (9/15 & 9/17): Theories of Etiology – Beyond Refrigerator Mothers

Overriding questions/Key ideas:
What can the array of theories of etiology tell us about diagnostic validity?
Where do “folk theories” of etiology fit in? Are they worth considering?
When is understanding etiology important for diagnosis and treatment?

Thought Question: Is there any validity to the refrigerator mother theory? Explain.


Disorder (ASD). Reproductive Toxicology.

Optional/For your reference:


WEEK 5 (9/22 & 9/24): Other Theories of Etiology & Prevalence

Overriding questions/Key ideas:
What are identified contributors to the rise in ASD diagnoses? How plausible is the notion of a “true increase?”
What is the relationship between etiology and prevalence? What can this tell you about classes of psychological diagnoses more broadly?

Thought Question: If someone asked you, “you took an autism class, why is it increasing,” what would you say?

9/22: GUEST SPEAKER Becca Lory


Optional/For your reference:


**WEEK 6 (9/29 & 10/1): Neurobiology of Autism**

**Overriding questions/Key ideas:**
- Why is it important to understand the neural underpinnings of ASDs?
- What does structural MRI tell us that fMRI cannot? What does ERP tell us that MRI cannot?
- Can we identify ASDs by neuroimagining methods? If so, should we? If not, should we try?
- What are ethical implications of this?

**Thought Question:**
What is the value of studying the neurobiological underpinnings of autism?

10/1: GUEST SPEAKER Allison Jack, PhD


Optional/For your reference:


**WEEK 7 (10/6 & 10/8): Social Cognitive Processes – Joint Attention & Theory of Mind**

***********PROPOSALS DUE***********

Overriding questions/Key ideas:
How feasible is the Theory of Mind Hypothesis of autism?
How does joint attention develop into Theory of Mind? How does Theory of Mind then develop?
What does it mean that individuals with ASDs don’t fail all Theory of Mind tasks?
How do Theory of Mind impairments relate to neurobiological and etiological theories?

Thought question:
Do you buy the Theory of Mind account of autism? Why or why not?

10/6: Student Presentations: Anthony M. & Rolando
10/8: GUEST SPEAKER, Pamela Block, PhD


Optional/For your reference:


**PART III: OTHER FEATURES & INTERVENTIONS**

**WEEK 8 (10/13 & 10/15): Behavioral Correlates & Comorbidities**

Overriding questions/Key ideas:

- Why do individuals with ASD experience behavior problems?
- Do psychological comorbidities (e.g. anxiety, depression) in ASDs look the same as they do in typically-developing individuals?
- Do comorbidities ever develop as a result of ASD symptoms?
Thought Question: Are the behaviors evident in autism primary symptoms, or are they an outgrowth of other characteristics? Explain your answer.

10/13: Student Presentations: Elliot, Rachel, & Rolando
10/15: GUEST SPEAKERS Drs. Rebecca Sachs & David Makowski


Optional/For your reference:


**WEEK 9 (10/20 & 10/22): Perceptual Processes & Sensory Abnormalities**

**Overriding questions/Key ideas:**
How do perceptual abnormalities relate to ASD diagnoses? Do they lead to diagnostic features, vice versa, or neither?
How would the perceptual abnormalities of ASDs appear in typically developing individuals?
How do perceptual abnormalities relate to social cognitive processes in ASDs?
Thought Question: What is the relationship between perceptual/sensory and behavioral issues in autism?

10/20 or 10/22: Student Presentations: Anthony B. & Anthony M.
10/22: GUEST SPEAKER Noah Britton, M.A.


Optional/For your reference:


**WEEK 10 (10/27 & 10/29): Emotion Understanding and Expression**

Overriding questions/Key ideas:
- How does emotion perception relate to social cognition and basic perception in ASDs?
- Is empathy really impaired in ASDs?
- How does emotional understanding in ASD develop differently from typical development?
Thought question: What is the relationship between expressive and receptive emotion understanding?

10/27 or 10/29: Student Presentations: Elliot & Anthony


Optional/For your reference:


**WEEK 11 (11/3 & 11/5): Social Relationships and Attachment**

**Overriding questions/Key ideas:**
- How does emotional development in ASDs influence social development?
- Can environmental (social) factors impact friendship development in ASDs?
- Is attachment related to social development in ASDs differently than in typical development?

<table>
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<th>Thought Questions: Why is it hard for people with autism to make friends?</th>
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**11/3 or 11/5: Student Presentations: Debi, Bianca, & Rachel**


**Optional/For your reference:**


**WEEK 12 (11/10 & 11/12): Long Term Outcomes & the Long View**

**********11/12: ABCT CONFERENCE, NO MATT, BUT OPTIONAL CLASS**********
Thought Question: Do you know adults who might qualify for autism diagnoses? Are you sure? How?

11/10: GUEST TEACHER/SPEAKER: Lauren Moskowitz, PhD


Optional/For your reference:


WEEK 13 (11/17 & 11/19): Intervention I: Early Intervention & Behavioral Approaches

Overriding questions/Key ideas:
Why is Early Intervention indicated for individuals with ASDs?
How do intervention practices relate to specific areas of deficits for individuals with ASDs?
What is the value of behavioral approaches to treating ASDs? What is their limitation?
Thought Question: Do you think behavioral approaches are the best way to treat all autism-related problems? Why or why not?

11/17: GUEST SPEAKER: Kerry Ann Conde, PhD & Linda Schreiber, PhD

11/17 or 11/19: Student Presentations: Debi & Bianca


Optional/For your reference:


**WEEK 14 (11/24, 12/1, 12/3): Intervention II: Social Skills and Beyond**

***************11/26: THANKSGIVING, NO CLASS***************

**Overriding questions/Key ideas:**
- Why might purely behavioral approaches be insufficient for addressing social deficits in ASDs?
- How are alternative methods of intervention related to the core features of ASDs?
- Given all you’ve learned about ASDs, how would you proceed in evaluating a novel theory of ASD etiology or intervention?

**Thought Question: Knowing what you know now, if you had a child with autism, what would you do?**


**Optional/For your reference:**


