Behavior Analysis in Developmental Disabilities (EAB 6716)

Instructor: Timothy R. Vollmer, Ph.D., Professor of Psychology

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Meeting time: Monday, 3:00 PM-6:00 PM Office hours: Monday 1:00PM-3:00PM

Class Location: Psychology 129

Overview. Students are expected to have extensive background in applied behavior analysis prior to enrollment. Applied behavior analysis has had considerable influence in the field of developmental and intellectual disabilities/disorders. The proliferation of behavioral methods and principles in this realm has led to restructuring of our legal, residential, and educational systems as they relate to treatment of individuals with developmental and intellectual disabilities/disorders. This seminar has five general goals: 1. To provide experiential learning by active engagement in one or more clinical research project throughout the semester (mainly involving Autism Spectrum Disorder, Smith-Magenis Syndrome, other rare genetic developmental disorders, or Pediatric Feeding Disorder). 2. To familiarize students with various developmental disorders/diagnoses, 3. To familiarize students with contemporary issues in developmental and intellectual disabilities/disorders, 4. To familiarize the students with classic and recent behavioral research or discussion papers in developmental and intellectual disabilities, 5. To allow students an opportunity to write a proposal for research, and 6. To allow students to practice participating in the development of a grant application

<u>Class structure.</u> There will be some variation to the structure each week, but most weeks will follow this structure: 1. Announcements/housekeeping items, 2. Data presentations and experiential learning reviews, 3. Proposal presentations, 4. Conference presentation practice, 5. Article review, 6. written proposal updates, and 7. Grant planning.

Experiential learning/data presentations. Students will participate as collaborators in at least one clinical research project throughout the semester. They will provide data reviews and participation summaries several times per semester (at least three times). On at least three occasions, students will present data from the study they are involved with. These presentations are typically about 15 minutes each. They consist of updates of projects but require graphical presentation of data.

<u>Participation</u>. Students will be expected to participate in the discussion with high quality questions and comments. Depth and quality of participation will be viewed more favorably than high frequency, low quality participation. Although this category is necessarily subjective, students are encouraged to check in with the instructor frequently for feedback, and some feedback will be given throughout the semester if the instructor believes a problem exists.

<u>Proposal presentations</u>. On at least one occasion, students will present a research proposal. These should include a discussion of relevant background literature, methods, proposed data analysis, and discussion of possible implications.

Conference presentation practice. Near the end of the semester, students will practice presenting either a conference paper (such as from a symposium) or a poster. These should include a discussion of relevant background literature, methods, proposed data analysis, and discussion of possible implications.

<u>Article reviews</u>. Each student will serve as discussion leader for 2 article discussions, based on the schedule of reading (see bibliography). This should include a brief summary of the article, then presentation of at least three questions for the group to consider for discussion.

<u>Written proposal.</u> Due at the end of the semester, each student will have submitted a research proposal based on the guidelines of their current academic status (e.g., thesis proposal, dissertation proposal, senior thesis proposal). These should include a discussion of relevant background literature, methods, proposed data analysis, and discussion of possible implications.

<u>Grant planning</u>. As a group project, the class will develop a research plan for submission as an application for funding. This will take the form of an NIH R21 proposal. Individuals within the group will get weekly assignments to fulfill.

Grading

The course grade will be based on the following: Data presentations (30 pts), participation (50 pts), proposal presentation (20 pts), conference presentation (20 pts), article reviews (40 pts), written proposal (20 pts), and grant planning (20 pts).

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186-200 = A

180-185.5= A-

171-179.5= B+

165-170.5 = B

160-164.5 = B-

161-169.5= B+

155-160.5 = B

150-154.5 = B-

141-149.5= C+

135-140.5 = C

130-144.5 = C-

121-129.5= D+

115-120.5 = D

114.5 or lower= does not pass
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For UF policies please review material in the following link:

https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Schedule

January 12: Planning and organization

January 19: No class, MLK day

January 26: Behavior Analysis in ASD

Reading: Gilroy et al. (2025)

February 2: Behavior Analysis in SMS

Reading: Hodnett et al. (2018)

February 9: Behavior Analysis in ID/D.

Reading: Thompson, T. (2007).

February 16: Behavior Analysis in Pediatric Feeding Disorder

Reading: Zeleny et al. (2020).

February 23: Interactions between pain/discomfort and operant contingencies

Reading: Symons et al. (2009)

March 2: Self-care and grooming

Reading: Pendergrass et al (in progress)

March 9: Parent training and parenting

Reading: Perrino et al. (in progress)

March 16: Spring break

March 23: Sociability assessments

Reading: DeZayas et al. (in progress)

March 30: Prompting techniques

Reading: Schnell et al. (2020)

April 6*: Pica

Reading: Frank-Crawford et al. (2025)

April 13: Social validity

Reading: Stephens et al. (2025) or Vollmer et al. (in progress)

April 20: Posters, presentations, proposals Reading: Call et al. 2025)

*date and location TBD

Bibliography

- Call, N. A., Williams, C. L., Mevers, J. L., & Argueta, T. (2025). Scholarship as an operant class: Strategies and tactics for increasing dissemination of applied behavior analysis. *Journal of Applied Behavior Analysis*, *58*(4), 668–686. https://doi.org/10.1002/jaba.70028
- Frank-Crawford, M. A., Hagopian, L. P., Scheithauer, M., McMahon, McMahon, M.X.H., Argueta, T., Call, N.A., & Schmidt, J.D. (2025). Assessment and treatment of pica: a consecutive controlled case series study. *Journal of Applied Behavior Analysis*, 58(4), 771-793, https://doi.org/10.1002/jaba.70035.
- Gilroy, S. P., Ledford, J. R., Elliott, T. C., Ayres, K. M., & McGill, F. (2025). Extending the Single Case Analysis and Review Framework (SCARF-UI): A review and discussion. *Journal of Applied Behavior Analysis*, *58*(4), 687–700. https://doi.org/10.1002/jaba.70033
- Hodnett, J., Scheithauer, M., Call, N. A., Mevers, J. L., & Miller, S. J. (2018). Using a functional analysis followed by differential reinforcement and extinction to reduce challenging behaviors in children with Smith-Magenis syndrome. *American Journal on Intellectual and Developmental Disabilities*, 123(6), 558–573. https://doi.org/10.1352/1944-7558-123.6.558
- Schnell, L. K., Vladescu, J. C., Kisamore, A. N., DeBar, R. M., Kahng, S., & Marano, K. (2020). Assessment to identify learner-specific prompt and prompt-fading

procedures for children with autism spectrum disorder. Journal of Applied Behavior Analysis, 53(2), 1111–1129. https://doi.org/10.1002/jaba.623

Stephens, M. J., Wessel, M. A., Melanson, I. J., & Kranak, M. P. (2025). A concise review of social validity assessments during functional analyses of challenging behavior. *Journal of Applied Behavior Analysis*, *58*(4), 896–905.

https://doi.org/10.1002/jaba.70031

Symons, F. J., Harper, V. N., McGrath, P. J., Breau, L. M., & Bodfish, J. W. (2009).

Evidence of increased non-verbal behavioral signs of pain in adults with neurodevelopmental disorders and chronic self-injury. *Research in developmental disabilities*, 30(3), 521–528. https://doi.org/10.1016/j.ridd.2008.07.012

Thompson, T. (2007). Relations among functional systems in behavior analysis. *Journal* of the Experimental Analysis of Behavior, 87(3), 423–440.

https://doi.org/10.1901/jeab.2007.21-06

Zeleny, J. R., Volkert, V. M., Ibañez, V. F., Crowley, J. G., Kirkwood, C. A., & Piazza,
C. C. (2020). Food preferences before and during treatment for pediatric feeding disorder. Journal of Applied Behavior Analysis, 53(2), 875-888. https://doi.org/10.1002/jaba.625

Unpublished manuscripts to reviewed while writing is in progress:

Pendergrass: Hair grooming

Perrino: Parent training in pediatric feeding disorder

DeZayas: Sociability assessments

Vollmer et al: Social validity and single-case experimental designs