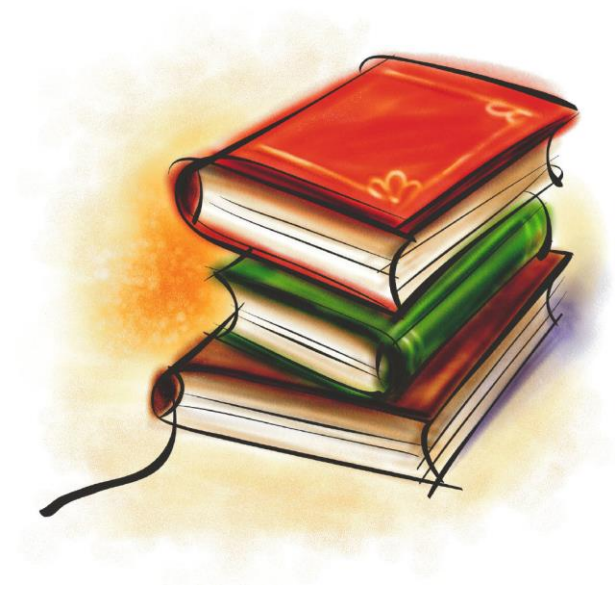


**RESEARCH ASSISTANT'S HANDBOOK  
FOR THE DOUGLASS  
DEVELOPMENTAL DISABILITIES  
CENTER**

**First Semester Research Assistants  
Fall 2017**



Erica M. Dashow, M.S., BCBA, Research Coordinator

**DDDC Research Course – Fall 2017**  
**Wednesdays, 3:00-4:30 pm, Ryders Lane Building Room 123**  
**Instructor: Erica Dashow**  
**Contact: emd164@dddc.rutgers.edu**  
**Office hours: By Arrangement**

<u>Week</u>	<u>Topic</u>	<u>Assignment Due</u>
9/6	Introduction to Course	
9/13	What is Autism?	Classroom Observations <i>Must have completed IRB approval</i>
9/20	Intro to ABA	Mesibov Ch 2 Harris & Weiss Ch 1 & 5
9/27	Science, Pseudoscience, & Antiscience Understanding Scientific Writing	Green Ch 2
10/4	Defining Behavior and Taking Data	Cooper Ch 3, 4, & 6 (p 149-155) Kazdin Ch 3, 6 (p 121-127) & 12 (p 285-293)
10/11	Interobserver Agreement & Reliability	Cooper Ch 5 Kazdin Ch 5 <i>Article Synopsis Due</i>
10/18	Intro to Experimentation, Single Case Design	Kazdin Ch 2 Cardon & Azuma, 2011 <i>Evaluations</i>
10/25	ABAB Design	Kazdin Ch 6 (p 127-143) Dugan et al., 1995
11/1	Alternating Treatment Designs	Kazdin Ch 9 Northup et al., 1999
11/8	Multiple Baseline Designs Changing Criterion Designs	Kazdin Ch 7 & 8 DeLuca & Holborn, 1992 Ward & Carnes, 2002 <i>Article Synopsis Due</i>
11/15	Graphing data for Visual Inspection	Kazdin Ch 13 Dixon et al., 2009 <i>Paper Outline Due</i>
11/22	Behavioral Assessment	Kazdin Ch 1 & 4 <i>Evaluations</i>
11/29	Article Presentations/catch up day	Kazdin Chapter 12 (p 293-322) & 14 <i>Article Presentations</i>
12/6	Catch up day	<i>Final paper due</i>

## DDDC Research Course Overview

The Research Course is offered through the Division of Research and Training at the Douglass Developmental Disabilities Center (DDDC). The DDDC serves the dual functions of providing services to children with autism and their families as well as advancing knowledge of the understanding and treatment of autism.

The course is designed to expose students to applied behavior analytic research with children with autism. The required commitment to the course consists of 140 hours total (divided between both research and academic activities).

*IRB approval* – University and federal regulations require that individuals involved in research activities must complete certification in working with human subjects. This requirement must be completed by the middle of September.

*Two (2) Article summaries* - Article summaries are aimed to help students learn how to critically read and understand research articles. Article summaries will be handed in and critiqued by the instructor. Each article summary should be no longer than 4 pages in length. Article summaries will be due on **10/11** and **11/8** by email. On **11/29**, you will present your article synopses to each other as a group.

*Final Paper* - The final paper is similar to an ‘Introduction’ and ‘Method’ Section in a research report. The final paper includes a comprehensive literature search and review on a topic of each student’s choice, and a proposed method section for how to conduct a study on that topic. Papers should address topics that can be thought through in applied behavior analytic terms. Grading is based on how thorough the review is, the content of the article critiques, and the interpretation of the results and designs. The final paper should be between 8-10 pages in length. A one-page outline of the final paper will be due on **11/15** and the final paper will be due on or before **12/6**, by email.

*DDDC Research Activities* - Involvement in the research activities at the DDDC is 8.5 hours per week. Some of the activities involve collecting observational data, running assessments, data coding, checking data, helping with preparatory work, sending surveys and mailings, and entering data. Reliability training will be a part of preparing for all observations and data coding.

### Textbook

Kazdin, A.E. (2011). *Single Case Research Designs: Methods for Clinical and Applied Settings, Second Edition*. Oxford University Press. The book and other readings are on reserve in the research office.

\*Assigned readings from this book will be emailed out on a weekly basis. **You do not need to purchase the textbook.**

### Grading

45% of the final grade is determined by the assignments: IRB approval (5%), final research paper (20%) and article summaries (each 10%). 55% of the final grade is determined by involvement and participation in the ongoing research activities. There will be two evaluations during the semester: once mid-semester (20%) and once at the end of the semester (35%). The evaluations will be shared with each student. A copy of the form to be used is contained in the handbook.

## **Attendance Policy**

As part of the research team at the DDDC, it is important that you consider yourself an invaluable asset to us and to the ongoing research conducted here. We certainly feel that way! As a result, your attendance is crucial.

If, in the case of illness or some other unforeseen event, you do need to be absent on a particular day, please be sure to email Erica no later than 8:30am that day. Also, if you need to miss a class meeting for some reason, please be sure to let Erica know as soon as possible, and at the latest, email that morning.

Any hours missed must be made up by arrangement.

## **Dress Code**

The DDDC serves as a demonstration facility and, as such, it is frequently visited by members of the professional and lay communities. Each year, hundreds of prospective parents, interested professionals, and other members of the community tour our school. Not only do researchers represent the DDDC through their actions, but also through their appearance. Researchers are expected to maintain acceptable standards of grooming and to dress neatly and appropriately. The following standards have been established to clarify these expectations:

1. Please refrain from wearing clothing that is ripped or shredded.
2. Please refrain from wearing leggings.
3. Please refrain from wearing T-shirts with inappropriate prints, derogatory slogans, foul language, political sayings, and other features that people *may* find objectionable.
4. For your safety and protection of your property, hanging jewelry should not be worn, particularly hoop or dangling earrings and necklaces.
5. Closed-toed shoes are required in the school building.
6. Shorts, skirts, and dresses must be no more than approximately 2” to 3” above knee length.
7. Shirts that expose the stomach/torso or are low-cut in front, back, or sides; excessively tight or see-through are not permitted in the school building.

If you are found in violation of the dress code, you will be asked to go home and change. Missed hours must be made up by arrangement.

DOUGLASS DEVELOPMENTAL DISABILITIES CENTER  
Evaluation and Checklist of Research Competency

Research students are formally evaluated twice during the semester. The purpose of the initial evaluation is to provide each assistant with specific feedback about his or her performance and to give suggestions, where necessary, for improvement. It will determine 20% of your final grade. The final evaluation will take place at the end of the semester and will determine 35% of your grade for the course.

The evaluation form consists of a number of areas on which each assistant will be rated. It is recommended that research assistants read through each of these areas of competence to gain familiarity with what is expected. Note that not every item may apply to every student every semester. If a particular objective is not applicable during the semester, then your total score will be interpolated. However, the boldfaced objectives reflect skills necessary at all times for adequate performance in your position as a research assistant.

When reviewing the initial evaluation, keep in mind that no 'grades' are assigned. Given this, a lower rating may be assigned. To some extent this is expected since you will need much more supervision and guidance at the beginning of your training here at the Center. As the semester progresses, you will gain both competence and independence. Therefore, the final evaluation should reflect such a gain. If there are any questions concerning the individual objectives and/or the ratings received, speak to the Research Coordinator.

#### Rating Categories

- 1     *Unsatisfactory:* Performance does not meet the requirements and expectations for the position.
- 2     *Needs Improvement:* Performance is often satisfactory but does not consistently meet the requirements for the position.
- 3     *Competent:* Performance is adequate, effective, and fully meets the requirements and expectations for the position.
- 4     *Highly Competent:* Performance consistently exceeds the requirements and expectations for the position.

#### Optional Rating Scale for Checklist

The following designations may be used to highlight specific items:

"N.A."           Item not applicable at this time

## Researcher Evaluation Checklist

### **Classwork Requirements:**

- \_\_\_\_ \_\_\_\_ 1. The researcher is able to complete individual seminar assignments.
  - \_\_\_\_ \_\_\_\_ Identifies areas of interest.
  - \_\_\_\_ \_\_\_\_ Critically analyzes research papers in a literature review.
  - \_\_\_\_ \_\_\_\_ Turns in work on time.
  - \_\_\_\_ \_\_\_\_ Works on project outside of DDDC hours.
  - \_\_\_\_ \_\_\_\_ Requests help when needed.

Comments: \_\_\_\_\_  
\_\_\_\_\_

- \_\_\_\_ \_\_\_\_ 2. The researcher participates actively in seminar meetings.
  - \_\_\_\_ \_\_\_\_ Comes prepared when necessary for regular meeting.
  - \_\_\_\_ \_\_\_\_ Presents in a manner which reflects adequate preparation and familiarity with material.
  - \_\_\_\_ \_\_\_\_ Contributes to flow of group discussions when they occur.
  - \_\_\_\_ \_\_\_\_ Turns in work on time.
  - \_\_\_\_ \_\_\_\_ Inquires about material not readily understood.

Comments: \_\_\_\_\_  
\_\_\_\_\_

### **Research Department Requirements:**

- \_\_\_\_ \_\_\_\_ 3. The researcher follows procedures in the research protocols.
  - \_\_\_\_ \_\_\_\_ Demonstrates the ability to follow the procedures of a particular protocol.
  - \_\_\_\_ \_\_\_\_ Offers reward and/or feedback to child as indicated in the protocol.
  - \_\_\_\_ \_\_\_\_ Prepares materials for a research session.

Comments: \_\_\_\_\_  
\_\_\_\_\_

- \_\_\_\_ \_\_\_\_ 4. The researcher demonstrates clinical skill and knowledge of ABA techniques.
  - \_\_\_\_ \_\_\_\_ Maintains high level of enthusiasm when working with students.
  - \_\_\_\_ \_\_\_\_ Reinforces appropriate student behavior between trials (“good sitting,” “excellent working”).
  - \_\_\_\_ \_\_\_\_ Reorganizes materials and presents SDs fluidly and with a steady pace.
  - \_\_\_\_ \_\_\_\_ Ignores inappropriate behaviors when indicated by the protocol.
  - \_\_\_\_ \_\_\_\_ Demonstrates attention to individual student needs (e.g. need for breaks).

Comments: \_\_\_\_\_  
\_\_\_\_\_

- \_\_\_\_ \_\_\_\_ 5. The researcher follows procedures for data collection and analysis.
  - \_\_\_\_ \_\_\_\_ Accurately records session and TI data (in session and from videos).
  - \_\_\_\_ \_\_\_\_ Accurately analyzes session data (in session and from videos).
  - \_\_\_\_ \_\_\_\_ Attends to daily tabulations and/or keeps up with graphing.
  - \_\_\_\_ \_\_\_\_ Demonstrates awareness of when to seek assistance if problems arise.

Comments: \_\_\_\_\_  
\_\_\_\_\_

- \_\_\_\_ \_\_\_\_ 6. The researcher can independently and productively utilize time.
  - \_\_\_\_ \_\_\_\_ Initiates tasks which need to be done.
  - \_\_\_\_ \_\_\_\_ Completes relevant tasks independently.
  - \_\_\_\_ \_\_\_\_ Requests necessary information when unsure and asks for supervision when needed.
  - \_\_\_\_ \_\_\_\_ Demonstrates ability to plan time to accomplish tasks.
  - \_\_\_\_ \_\_\_\_ Informs supervisor when delegated tasks are completed.

Comments: \_\_\_\_\_  
\_\_\_\_\_

- \_\_\_\_ \_\_\_\_ 7. The researcher fulfills his/her daily responsibilities.
  - \_\_\_\_ \_\_\_\_ Follows daily schedule routines and demonstrates initiative without excessive prompting by supervisor.
  - \_\_\_\_ \_\_\_\_ Has good attendance record.
  - \_\_\_\_ \_\_\_\_ Arrives on time.
  - \_\_\_\_ \_\_\_\_ Calls 30 minutes before scheduled time if absent and understands that make-up understands that make-up time may need to be scheduled during Finals Week.
  - \_\_\_\_ \_\_\_\_ Maintains neatness in research office or other relevant work areas and restores order at end of day.
  - \_\_\_\_ \_\_\_\_ Remembers to record daily accomplishments in blue book.

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Professionalism Requirements:**

- \_\_\_\_ \_\_\_\_ 8. The researcher treats students appropriately and professionally.
  - \_\_\_\_ \_\_\_\_ During research or assessment activities, treats child with compassion and respect.
  - \_\_\_\_ \_\_\_\_ During research or assessment activities, provides adequate supervision of child at all times.
  - \_\_\_\_ \_\_\_\_ Appropriately responds to behavioral interferences.
  - \_\_\_\_ \_\_\_\_ Immediately notifies coordinator and/or teacher of any injuries.

Comments: \_\_\_\_\_  
\_\_\_\_\_

- \_\_\_\_ \_\_\_\_ 9. The researcher relates well to other assistants, supervisors, and classroom staff.
- \_\_\_\_ \_\_\_\_ Effectively communicates problems and concerns to supervisor.
  - \_\_\_\_ \_\_\_\_ Effectively communicates problems and concerns to fellow research assistants.
  - \_\_\_\_ \_\_\_\_ Informs the supervisor of difficulties or problems as soon as they arise.
  - \_\_\_\_ \_\_\_\_ Demonstrates respect for fellow researchers and supervisors.
  - \_\_\_\_ \_\_\_\_ Is able to work well with other assistants.
  - \_\_\_\_ \_\_\_\_ Is polite to teaching staff when taking children.
  - \_\_\_\_ \_\_\_\_ Is sensitive to classroom priorities.

Comments: \_\_\_\_\_  
\_\_\_\_\_

- \_\_\_\_ \_\_\_\_ 10. The researcher demonstrates a high level of professionalism.
- \_\_\_\_ \_\_\_\_ Demonstrates awareness of and adheres to issues regarding confidentiality.
  - \_\_\_\_ \_\_\_\_ Refrains from acting or conversing in a manner that would be deemed inappropriate or unprofessional by others.
  - \_\_\_\_ \_\_\_\_ Dresses in a professional matter (according to DDDC dress code).
  - \_\_\_\_ \_\_\_\_ Uses research time and DDDC computer for research purposes only.

Comments: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ INITIAL EVALUATION (date \_\_\_\_\_)

\_\_\_\_ FINAL EVALUATION (date \_\_\_\_\_)



# Article Synopsis

## Fall 2017

Each article synopsis must be a review of an article that uses a single case research design. An article synopsis includes summary information about the article as well as a critique of the study. I should be able to read the synopsis and understand what the authors were trying to accomplish in the study, what they did to accomplish this goal, and the results of the study.

Please include:

### Summary Information

- \_\_\_ An “abstract” version of the study (200 words or less)
- \_\_\_ A brief synopsis of the study.
- \_\_\_ Hypothesis?
- \_\_\_ What type of design?
- \_\_\_ What behaviors are they trying to change?
- \_\_\_ How are they trying to change it?
- \_\_\_ What are they measuring and how?
- \_\_\_ Did they succeed? Was the intervention effective in changing what they wanted?
- \_\_\_ Any unexpected effects? (i.e. changes in behaviors that were not specifically targeted).

### Discussion Questions

- \_\_\_ Did you see/notice any difficulties with the study?
- \_\_\_ Any big problems with reliability, validity, or the design?
- \_\_\_ Why is the study important?

Attach a photocopy of the original article (including the references) to your synopsis when you hand it in. The article synopsis should be around 4 pages long – about 2.5-3 pages should be devoted to a summary of the article and ½-1 page should focus on a discussion / critique of the article. The last ½ page should be the abstract version of the study, which you should label “Abstract”. This will give you practice turning an entire article into an abstract.

**Article Synopses will be due: 10/11 and 11/8**

# Final Paper

## Research Review

### Fall 2017

A proposal includes a general discussion of the research in a given area and then proposes a study that would further knowledge in this area. The proposal should be around 8-10 pages long and must include:

- |  |                   |
|--|-------------------|
| ▪ A Title Page (title, your name)                | 1 page            |
| ▪ An Abstract (summary of proposal; ~ 200 words) | 1 page            |
| ▪ A Review of Literature                         | 4-6 pages         |
| ▪ Proposed Methodology                           | 1-3 pages         |
| ▪ References (APA format)                        | as many as needed |

The review of literature should (1) introduce a topic area, (2) suggest why research in this area is important, (3) review a number of articles in this area, and (4) then summarize what is known in the area. You must review at least 5 articles in the area of your choice, some of which must be single-case designs. Attach photocopies of the original articles (including the references) as email attachments to your proposal when you hand it in. Your proposed research study should be designed to answer an unknown but important question in the field.

#### Deadlines

<b>Outline Due:</b>	<b>11/15</b>
<b>Final Draft Due:</b>	<b>12/6</b>

Example Topics:

- ✘ Methods for Increasing Spontaneous Language in Children with Autism
- ✘ Self-Management in Adolescents with Autism
- ✘ Using Peer-Facilitated Interventions with Children with Autism
- ✘ Visual Strategies for Working with Children with Autism
- ✘ Using Obsessions as Token Reinforcers for Children with Autism
- ✘ Improving Social Interactions between Children with Autism and their Siblings