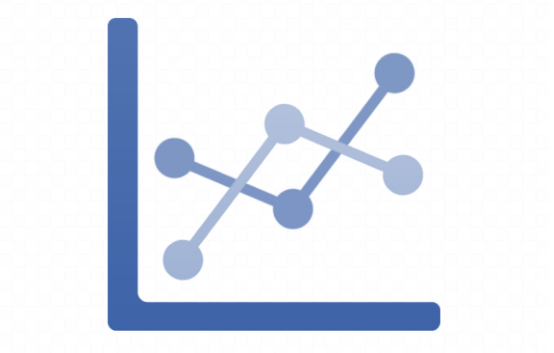
Department of Psychology

Master of Science in Psychology
Behavior Analysis Major

Capstone Project Handbook



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Introduction

All students in the Behavior Analysis Master's Program must complete a capstone project consisting of original, behavior analytic research utilizing a single-case research design. The development and implementation of the student's capstone project will take place over three consecutive semesters, during which the student will be engaged in a practicum experience. The project must be conducted at the student's practicum site. The time a student devotes to the project at the practicum site, or any extension thereof, will count toward the student's supervised fieldwork or concentrated supervised fieldwork hours and must meet the standards of the Behavior Analyst Certification Board.

Capstone projects shall include the activities listed below. Activities not listed below may also be included.

- Topic selection
- Literature search and review
- Conceptualizing and refining research ideas
- Selection of the research design
- Selection/development of independent variable and data collection procedures
- Selection/design of the consent form and training materials
- Obtaining approval of the project from the BAMS program and practicum site
- Selection/construction of data collection, assessment, and survey instruments
- Participant recruitment
- Obtaining informed consent
- Implementing procedures
- Performing data analyses and computations (if applicable)
- Collecting data, including inter-observer agreement and treatment integrity
- Processing and graphing data
- Interpreting data
- Drafting and editing of manuscripts/posters
- Final project presentation

Roles

<u>Role of the Student</u>
The student is expected to take the lead and conduct the vast majority of the work related to each of the research activities listed above. The student will therefore be the primary, substantial contributor to the project. As such, the student will be the first author on any presentation and/or publication of their work. The student will be the sole author if no one else

is determined to have made a substantial contribution to the project or if all other substantial contributors decline to be named as authors.

Role of the BAMS Program Research Supervisor

The program research supervisor is responsible for approving all elements of the capstone project and is expected to provide guidance and feedback to the student on each of the research activities listed above, throughout the course of the project. This includes but is not limited to selection of the research topic, experimental design, and procedures, as well as assisting the student with multiple drafts of the research paper and all other written products used in the project. Therefore, the program research supervisor is expected to make a substantial contribution to the research project.

Role of the BAMS Program Practicum Supervisor

The program practicum supervisor will provide support and training relevant to students' practicum experiences and related topics. This may include assisting with the capstone project, including topic and participant identification, completion of approval documents, and providing feedback on various aspects of the project. The program practicum supervisor is not expected to make substantial contributions to the project. The program practicum supervisor will also ensure that students use the program's unique documentation system for tracking practicum hours and activities.

Role of the Practicum Site Supervisor

Each student must have a practicum supervisor that is employed at the student's approved practicum site. The supervisor must meet the BACB supervisor qualifications and must sign a supervision contract with the student. The practicum site supervisor is responsible for ensuring that the student's project is appropriate for the practicum setting and must approve all practical elements of the project including participant selection, experimental design, intervention, and data collection procedures. The practicum site supervisor is expected to assist the student with participant recruitment by identifying individuals who could benefit from participating in the study. The practicum site supervisor is also expected to assist the student with identifying individuals who may assist the student with implementation of project procedures and/or data collection. Additionally, it is natural and acceptable for the practicum site supervisor to make suggestion and recommendations to the student on various elements of the project. However, practicum site supervisors should not engage in any research activity listed above, or combination thereof, to an extent that is equivalent to or surpasses the contribution and effort of the student. Therefore, the practicum site supervisor is not expected to make a substantial contribution to the project.

Role of Project Assistants

It will be necessary for students to recruit project assistants for the purpose of obtaining inter-observer (IOA) agreement data. Project assistants may also implement procedures and collect participant data, if needed. The selection and participation of project assistants must be approved in advance by the practicum site supervisor. The participation of project assistants

should be limited to only those activities that cannot be completed by the student. Therefore, project assistants are not expected to make a substantial contribution to the project.

Project Approval

BAMS Internal Program Review

Students must apply for approval of their projects, via the Internal Program Review, prior to starting their research, including obtaining informed consent and collecting any type of assessment or baseline data. Students will submit a Capstone Project Approval Application. The application will be reviewed by the student's program research supervisor, program practicum supervisor and their practicum site supervisor. Approval by all three supervisors is required before the research can begin. Students will receive written notification of approval. Research approved via the Internal Program Review (IPR) process **may not be published or presented outside of the program**.

FIU Internal Review Board Approval

In order for research data to be presented outside of the BAMS program or published, the research must first be approved by the FIU Internal Review Board (IRB). As it can take several weeks to obtain IRB approval, the IRB process is not compatible with the capstone project timeline. Therefore, capstone projects may not be submitted for IRB approval. However, students who are interested in presenting their research outside of the program and/or submitting research data for publication should consult with their BAMS research supervisor. If agreed to by the supervisor, the student may seek approval from the FIU Internal Review Board (IRB) to conduct an extension of their capstone project. Such research will be separate from and in addition to the capstone project and will require the student to collaborate with their research supervisor after graduating from the program.

The FIU IRB protocol requires a faculty member to serve as the principal investigator (PI) on the project. Therefore, the student's research supervisor will be the PI. Projects that receive IRB approval may be presented outside of the BAMS program and published. Projects that receive FIU IRB approval must include an authorship plan. The authorship plan must be signed by the student, the research supervisor, and any other collaborators. The authorships plan must also be uploaded to the FIU IRB application.

Authorship Policy

The Behavior Analysis Master of Science program follows the authorship guidelines of the American Psychological Association Ethical Principles of Psychologists and Code of Conduct (2017), which includes the following:

> ***8.12 Publication Credit***
> *(a) Psychologists take responsibility and credit, including authorship credit, only for work they*

have actually performed or to which they have substantially contributed. (See also Standard 8.12b, Publication Credit.)

(b) Principal authorship and other publication credits accurately reflect the relative scientific or professional contributions of the individuals involved, regardless of their relative status. Mere possession of an institutional position, such as department chair, does not justify authorship credit. Minor contributions to the research or to the writing for publications are acknowledged appropriately, such as in footnotes or in an introductory statement.

Substantial Contribution

In accordance with the APA standards above, an individual who makes a substantial contribution to the project will be named as an author on any subsequent presentation and/or publication that results directly from the student's capstone project, provided the individual consents to the authorship. The student must obtain the individual's written consent to be identified as an author. The student and the student's program research supervisor will be responsible for determining if contributions made by others are substantial.

Exceptional Circumstances

Project contributors should not exceed the expectations of their role to an extent that might be considered a substantial contribution unless there is an exceptional circumstance. In such cases there must be a prior written agreement between the student, program research supervisor and contributor. The agreement must state:

1) the need for the additional contribution
2) the tasks that the contributor will engage in
3) the additional time and effort the individual will contribute, and
4) a statement that, if fulfilled, the additional contribution will be considered substantial.

At the conclusion of the student's project, the student and program research supervisor will determine if the contributor met the terms of the agreement. If so, the individual will be considered a substantial contributor and will be offered authorship on any subsequent presentation and/or publication of the student's project.

Author Affiliation

Any presentation or publication of the student's project will state each author's affiliation at the time the research was conducted. If an author's affiliation has since changed, the new affiliation may be acknowledged in a note.

Expected Project Timeline

Semester	Task/Assignment
1	Complete CITI training: http://research.fiu.edu/irb/training-requirements/
	Complete APA style training: https://apastyle.apa.org/instructional-aids/tutorials-webinars
	Identify research question
	Complete a literature review, including list of citations
	Provide a rationale for conducting the research study
	Identify the data collection methods to be used
	Identify the research design to be used
	Obtain approval of capstone project
	Identify potential participants
2	Create informed consent form
	Obtain client/participant signatures
	Begin pilot and data collection
	Write the methods section
	Write a rationale for the design used
	Represent data graphically and according to the selected design
3	Finalize data collection
	Write results section
	Write discussion section
	Create PPT presentation of final project
	Present project and final data to the class

Ethics of Research

All students conducting research must be well-versed in the ethics of conducting research. Students will be required to complete the CITI Social/Behavioral Human Subjects Research Course and be familiar with the BACB Ethics Code for Behavior Analysts; in particular, section 6 Responsibility in Research, listed below. A link for the CITI training will be provided in your supervised research course.

6.01 Conforming with Laws and Regulations in Research (see 1.02)

Behavior analysts plan and conduct research in a manner consistent with all applicable laws and regulations, as well as requirements by organizations and institutions governing research activity.

6.02 Research Review (see 1.02, 1.04, 3.01)

Behavior analysts conduct research, whether independent of or in the context of service delivery, only after approval by a formal research review committee.

6.03 Research in Service Delivery (see 1.02, 1.04, 2.01, 3.01)

Behavior analysts conducting research in the context of service delivery must arrange research activities such that client services and client welfare are prioritized. In these situations, behavior analysts must comply with all ethics requirements for both service delivery and research within the Code. When professional services are offered as an incentive for research participation, behavior analysts clarify the nature of the services, and any potential risks, obligations, and limitations for all parties.

6.04 Informed Consent in Research (see 1.04, 2.08, 2.11)

Behavior analysts are responsible for obtaining informed consent (and assent when relevant) from potential research participants under the conditions required by the research review committee. When behavior analysts become aware that data obtained from past or current clients, stakeholders, supervisees, and/or trainees during typical service delivery might be disseminated to the scientific community, they obtain informed consent for use of the data before dissemination, specify that services will not be impacted by providing or withholding consent, and make available the right to withdraw consent at any time without penalty.

6.05 Confidentiality in Research (see 2.03, 2.04, 2.05)

Behavior analysts prioritize the confidentiality of their research participants except under conditions where it may not be possible. They make appropriate efforts to prevent accidental or inadvertent sharing of confidential or identifying information while conducting research and in any dissemination activity related to the research (e.g., disguising or removing confidential or identifying information).

6.06 Competence in Conducting Research (see 1.04, 1.05, 1.06, 3.01)

Behavior analysts only conduct research independently after they have successfully conducted research under a supervisor in a defined relationship (e.g., thesis, dissertation, mentored research project). Behavior analysts and their assistants are permitted to perform only those research activities for which they are appropriately trained and prepared. Before engaging in research activities for which a behavior analyst has not received training, they seek the appropriate training and become demonstrably competent or they collaborate with other professionals who have the required competence. Behavior analysts are responsible for the ethical conduct of all personnel assigned to the research project.

6.07 Conflict of Interest in Research and Publication (see 1.01, 1.11, 1.13)

When conducting research, behavior analysts identify, disclose, and address conflicts of interest (e.g., personal, financial, organization related, service related). They also identify, disclose, and address conflicts of interest in their publication and editorial activities.
6.08 Appropriate Credit (see 1.01, 1.11, 1.13) Behavior analysts give appropriate credit (e.g., authorship, author-note acknowledgment) to research contributors in all dissemination activities. Authorship and other publication acknowledgments accurately reflect the relative scientific or professional contributions of the individuals involved, regardless of their professional status (e.g., professor, student).

6.09 Plagiarism (see 1.01)

Behavior analysts do not present portions or elements of another's work or data as their own. Behavior analysts only republish their previously published data or text when accompanied by proper disclosure.

6.10 Documentation and Data Retention in Research (see 2.03, 2.05, 3.11, 4.05)

Behavior analysts must be knowledgeable about and comply with all applicable standards (e.g., BACB rules, laws, research review committee requirements) for storing, transporting, retaining, and destroying physical and electronic documentation related to research. They retain identifying documentation and data for the longest required duration. Behavior analysts destroy physical documentation after making deidentified digital copies or summaries of data (e.g., reports and graphs) when permitted by relevant entities.

6.11 Accuracy and Use of Data (see 1.01, 2.17, 5.03)

Behavior analysts do not fabricate data or falsify results in their research, publications, and presentations. They plan and carry out their research and describe their procedures and findings to minimize the possibility that their research and results will be misleading or misinterpreted. If they discover errors in their published data they take steps to correct them by following publisher policy. Data from research projects are presented to the public and scientific community in their entirety whenever possible. When that is not possible, behavior analysts take caution and explain the exclusion of data (whether single data points, or partial or whole data sets) from presentations or manuscripts submitted for publication by providing a rationale and description of what was excluded.

Selecting a Research Topic

Selecting a topic that is of interest to you is extremely important since you will spend a considerable amount of time reading and writing about this topic. Consider different procedures to increase or decrease behavior or consider specific target behaviors that may be readily available to you. Note that "procedure" refers to any assessments, skill acquisition, behavior increase or behavior reduction intervention. Always consult with your practicum site supervisor with regards to the feasibility of the proposed project and prioritize social validity in your selection. Keep in mind that **punishment procedures are strictly prohibited** and that behavior reduction must rely exclusively on reinforcement-based intervention.

Project Types

Innovation – Development of a new procedure or modifying existing procedures in a way that may improve effectiveness (e.g., achieves greater behavior change), convenience (e.g., requires fewer resources to implement), or efficiency (e.g., achieves faster behavior change), when evaluated against published data.

Expansion – Application of an existing procedure to a new target behavior, setting or other environmental conditions.

Comparison – Compare the results or effects of two or more procedures (e.g., which intervention is more effective), target behavior (e.g., which target behavior is more responsive) or setting variables (e.g., noise or light levels).

Combination – Contains elements of two or more above.

Component- Evaluating the efficacy of a component of a treatment package to isolate its effects (e.g., the effects of modeling and feedback alone versus instructions, modeling, rehearsal, and feedback on mask wearing behavior)

Parametric- Evaluating the efficacy of varying degrees or intensity of a treatment (e.g., the effects of weekly versus daily graphic feedback on mask wearing behavior)

Literature Review

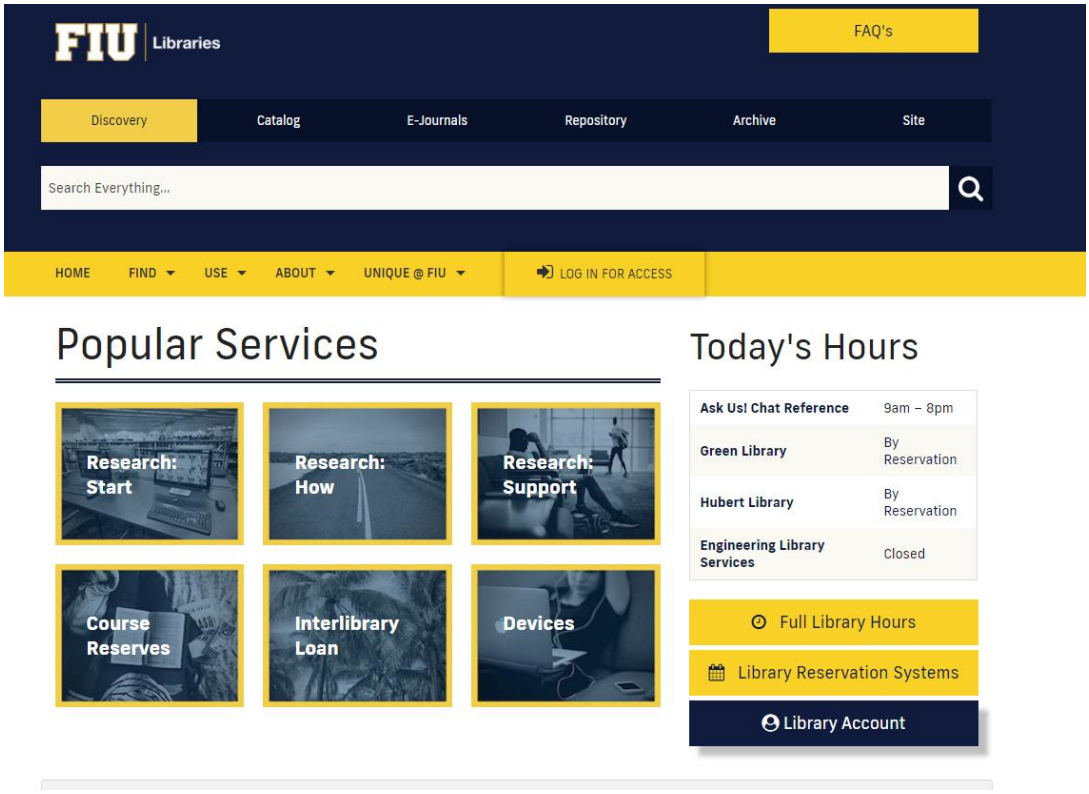
Once you select your topic you will need to complete a thorough review of ALL peer-reviewed literature that has been published about your research topic. There is no specific number of references to find, since each topic will result in a wide range of available research papers. Your literature review should include historical papers that demonstrate the origin of the procedures being used, as well as current, comparable procedures to highlight important differences and similarities across procedures. Direct replications are acceptable; however, you must conduct your own literature review of the procedure and may not rely solely on a single or a few research papers.

FIU Library Online Literature Search

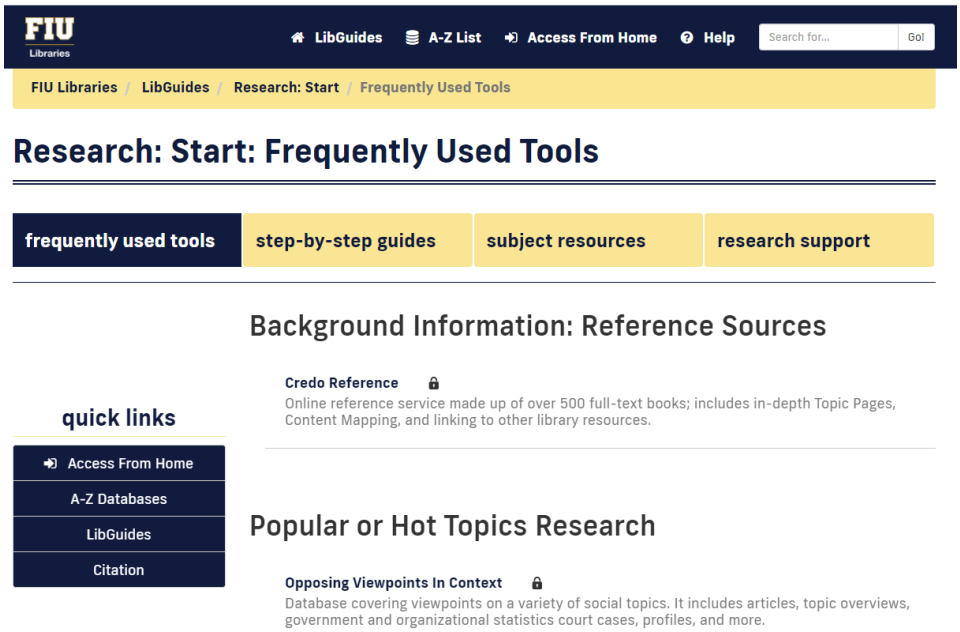
The university provides a rich set of resources through the library's online literature reserves. You should take full advantage of the resources provided in this medium, and you should not rely solely on Google searches and public domain materials.

How to Conduct a Search

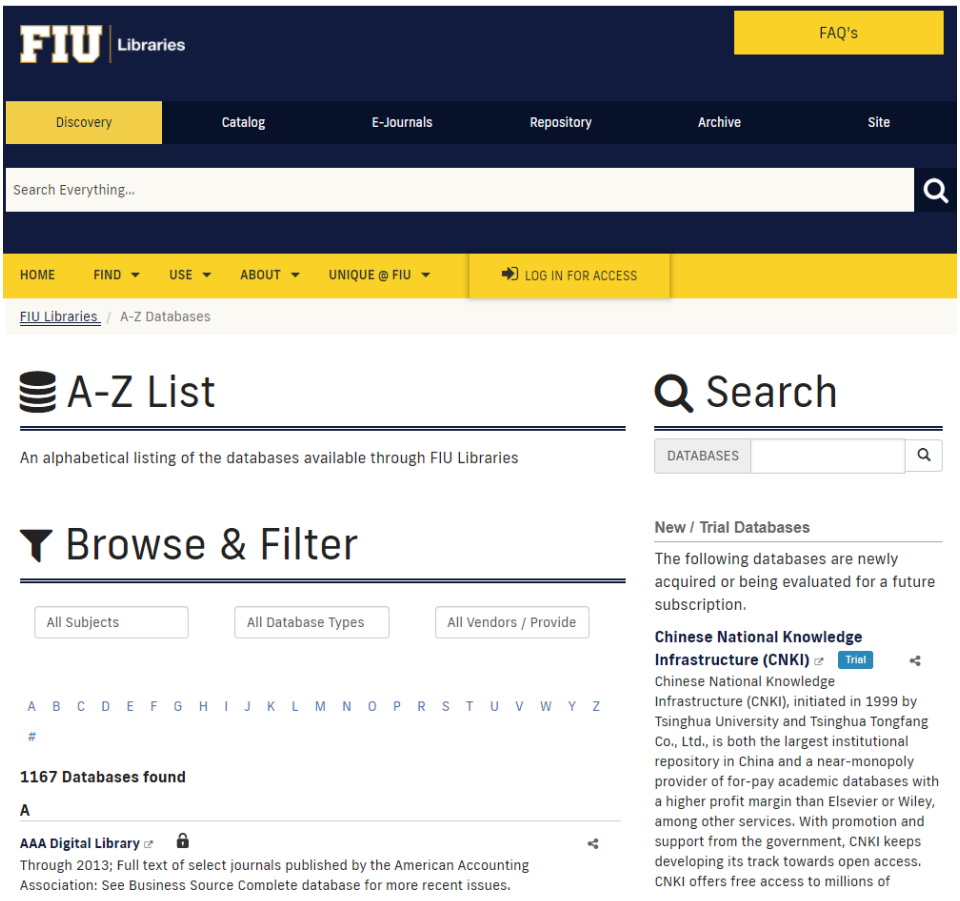
1. Go to library.fiu.edu
2. Click Research: start



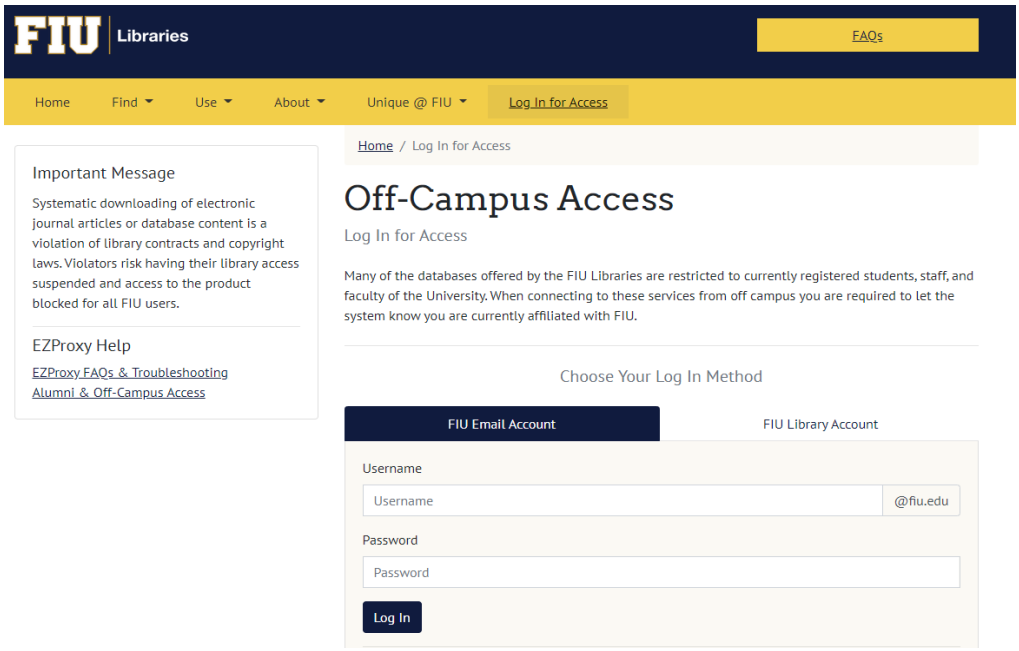
3. Click A-Z Databases



4. Click P then scroll to and click PsychINFO



5. Login with your FIU Username and Password



6. Enter search terms, check Peer reviewed, and apply other desired filters.

List of Behavior Analytic Journals

Your literature review should consist primarily of behavior analytic journal articles. There may be some references from outside the field, but they should only serve to supplement behavior analytic journals. Below is a list of Journals that Publish Behavior Analytic Research. This list is not exhaustive. Additionally, some of the journals listed may publish work that is not behavior analytic in nature.

American Journal on Intellectual and Developmental Disabilities
Analysis of Verbal Behavior
APBA Reporter
Autism
Autism Research
Behavior Analysis in Practice
Behavior Analyst / Perspectives on Behavior Science
Behavior and Philosophy
Behavior and Social Issues
Behavior Modification
Behavioral Interventions
Behavioral Processes
Education and the Treatment of Children
European Journal of Behavior Analysis
Health Psychology
Journal of Applied Behavior Analysis
Journal of Autism and Developmental Disorders
Journal of Behavioral Education
Journal of Developmental and Physical Disabilities
Journal of Early and Intensive Behavior Interventions
Journal of Experimental Analysis of Behavior
Journal of Organizational Behavior Management
Journal of the Experimental Analysis of Behavior
Perspectives on Behavior Science
Research in Autism Spectrum Disorders
Research in Developmental Disabilities
School Psychology Review
The Behavior Analyst (Perspectives on Behavior Science starting in 2018)
The Psychological Record
Topics in Early Childhood Special Education

Literature Review Rubric Items

The items below will be assessed as part of your grade when submitting your literature review.

Review of extant literature must include:
Clear statement of the problem that the literature being reviewed addresses
Literature reviewed is relevant to topic of concern
Literature reviewed is primarily published work found in peer-reviewed journals
Literature is organized into useful sections that promote readability
Literature of historical interest is mentioned briefly, but not excessively
More recent literature is emphasized (more than one published paper can be condensed into a single paragraph and even a single sentence)
Empirical literature is emphasized (more than one study can be condensed into a single paragraph and even a single sentence)
Particularly relevant empirical literature is *highly* emphasized (single studies that are important are detailed for design, results, and discussion points
Literature is summarized to draw attention to what has been discovered and what seems the next logical steps that a researcher would want to take to further build important scientific knowledge in this area
Purpose: a statement of the purpose of your investigation and the exact experimental question you are asking is stated.
Hypothesis: a statement of the hypothesis of your investigation is stated
The literature cited is primarily or exclusively behavior analytic in nature. Non-behavior analytic literature is used appropriately as background information.
APA Style:
Sources are appropriately and correctly cited in text
Title page
Running head
Page numbers
Page format including (1-inch margins, 12-point Arial font, double spaced, paragraph indents, etc.)
References
Writing:
Written using student's own words and paraphrasing. NO QUOTES USED
Grammar and punctuation
Turnitin match is less than 15%

Methods

After you have conducted a thorough search of the literature and have fully defined your research question and hypothesis you will need to define your methods. The methods section of your paper should describe the actions of the experimenter, assistants, and research participants to the extent that a reader may be able to replicate your study exactly as you executed it. In the proposal phase, the methods section may be written in the future tense, but it will need to be described in past tense for the final draft. There may be components of your methods section that cannot be defined until you have selected your participants. During the proposal phase, please indicate the actions that the experimenter will take to further define those aspects of the study (e.g., target behavior selection, prompting procedures, etc.)

Selecting Procedures

The selected intervention should seek to extend the existing literature to a new behavior, participant group (e.g., age or diagnosis), environmental condition (e.g., individual vs. group instruction) or procedure. Direct replications are allowed; however, they are limited to emerging procedures that would benefit from replication and should not be done with well-established procedures.

Selected procedures should rely primarily on the application of reinforcement and should be minimally intrusive. If utilizing skill acquisition programs, aversive antecedent manipulations and negative reinforcement contingencies may not be used. When focusing on behavior reduction procedures, please keep in mind that the reduction of target behaviors must be based on differential reinforcement contingencies and that the contingent application, removal or change in a stimulus condition for the purpose of reducing a target behavior (i.e., punishment) is not allowed.

Selecting Participants

Your practicum site supervisor should help you identify multiple individuals who could benefit from participating in your study. A minimum of three participants are required. Participants may be the primary recipient of behavior analysis services, caregivers, or agency staff. Select participants who are likely to remain with the agency for the duration of your project (three semesters). Select participants who reliably keep appointments and follow treatment recommendations. Do not select participants who have a recent history of self-injurious behavior or physical aggression toward others severe enough to cause injury. Individuals with a history of physically damaging behaviors (toward self, others, or property) should not be selected as participants.

Methods Section Rubric Items

The items below will be assessed as part of your grade when submitting your methods section.

Methods section must include:
Method section is broken into sections and subsections to promote readability
Participants are clearly identified
Setting is clearly specified
DVs are operationally defined technologically (i.e., such that future researchers can replicate) in functional and/or topographical terms and the reason for using functional and/or topographical definitions is clearly specified
IVs are defined technologically
Procedure for implementing the IV is described technologically
Experimental Design is clearly articulated
Procedures for collecting and checking data are clearly described, including the following specifications:
Rationale for type of data collected (frequency, rate, interval)
Data Accuracy (training of human data collectors or calibration of measuring instruments)
Data Reliability (Inter-Observer Agreement) procedures identified
Fidelity of implementation (Treatment or Procedural Integrity)
Functional Assessment procedures are identified (where appropriate)
Preference Assessment procedures are identified (where appropriate)
Social validity procedures are identified (where appropriate)
Style and APA Formatting:
Organization
Well-organized, sections flow well together
Logical narrative
Leads naturally to results section
Mechanics of Grammar
Punctuation, spelling, capitalization
Italics, bolds, underline
Abbreviations, numbers

Mechanics of Formatting
Line spacing, font, margins
Running head, headings, page numbers
Tables and figures/captions
Clarity
Writing is concise
Writing is humble and bias-free
Writing is scientific/behavior analytic
References
Citing references in text
Quoting and paraphrasing
Bibliography

Data Collection and Graphing

Design

This study must abide by the logic of single-case research designs, including the collection of baseline data and continuing in baseline or treatment phases until stability has been reached. The study must utilize one of the primary designs taught in the single case research designs course (e.g., reversal, withdrawal, multiple-baseline, or alternating treatments design). Combinations of designs and multiple-probe designs are discouraged and will require approval from the supervised research instructor.

Treatment Integrity

The student, as the primary investigator (PI), should implement the research procedures as much as possible. When necessary, a research assistant (RA) may be trained to implement procedures. Training should continue until a criterion of 100% accuracy is reached. Treatment integrity data should be collected for at least 25% of all data in each phase of the study, regardless of whether the PI or an RA is implementing the procedures. When multiple RAs are trained, treatment integrity data must be collected of each. Treatment integrity data my be collected in vivo, via remote observation (e.g., Facetime or Zoom), or from a video recording. The use of remote observation and/or video recording must be included in the consent form and agreed to by the participant's caregiver/legal guardian, Recordings must be destroyed at the conclusion of the capstone project.

Data collection and IOA

Data should be collected as frequently as possible and must be quantitative. Data may be collected by the student, caregiver, or agency employee. All data collectors must be trained to criterion. Training should continue until IOA reaches at least 80%. IOA should be calculated for at least 25% of all data collected in each phase of the study. All training procedures must be included in the methods section of the capstone project paper and training materials must be appended.

Graphing

All results should be displayed graphically based on the design selected. Please utilize all resources provided in the supervised research course to learn how to graph data for the selected design. Figures in reports should be displayed using APA 7 guidelines.

Graphing Rubric

The items below will be assessed as part of your grade when submitting your graphs.

General
Properly titled (top or caption)
Easy to read and interpret
Vertical/Y axis/Ordinate
Shows value of DV
Origin at zero
Scaled with equal intervals
Full range of data captured
Properly labeled
Scale break used if needed
Horizontal/X axis/Abscissa
Shows time/sessions/opportunities
Data point above tick marks
Scaled with equal intervals
Properly labeled
Scale break used if needed
Phase(s)
Properly Labeled
Condition/phase change line
Data Paths
Clear symbol(s) for each data path
Clear line(s)
Multiple data paths clearly labeled
Data points properly connected
Data points NOT connected:
o Across conditions/phases
o Data are discontinuous

WRITING YOUR PAPER

Capstone project papers must be written in APA style, 7th edition. Students are encouraged to purchase The Publication Manual of the American Psychological Association, Seventh Edition. The manual is available in multiple formats. https://apastyle.apa.org/products/publication-manual-7th-edition?tab=1

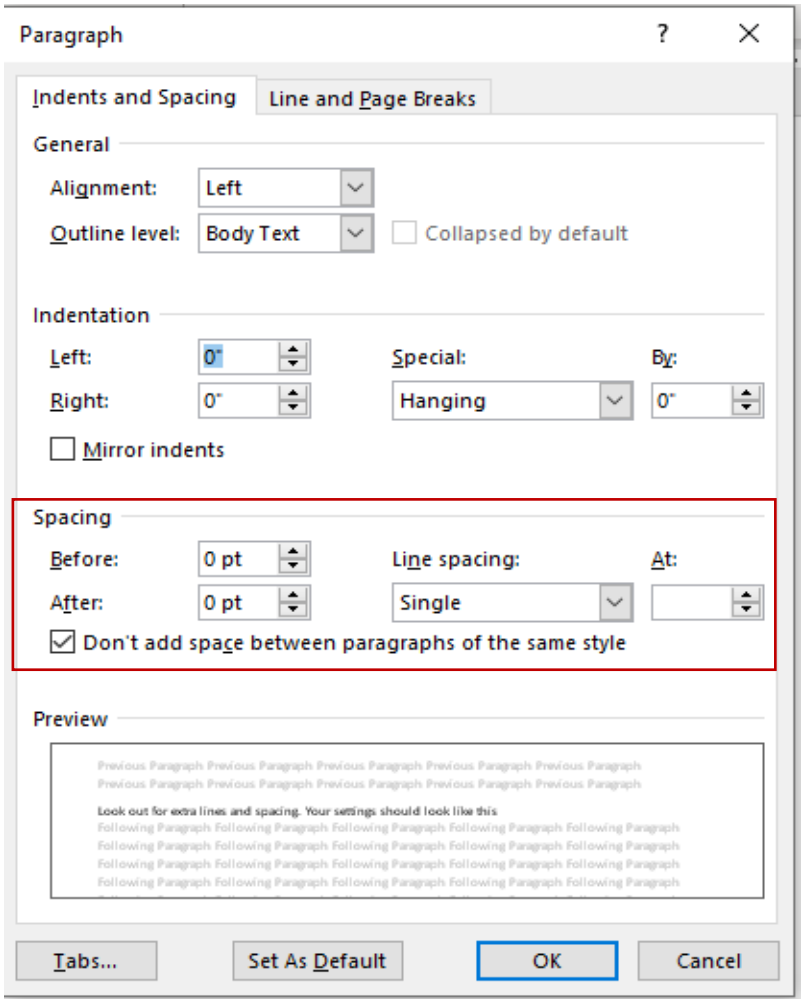
APA also, generously, publishes style guidelines on their website. Students may refer to these guidelines (linked below) in lieu of the manual.

APA Style & Writing Guidelines

- APA Style and grammar guidelines are available here: https://apastyle.apa.org/
- Refer to each of the following sections throughout the writing process, as applicable
    - Paper Format
    - In-Text Citations
    - Mechanics of Style
    - Bias-Free Language
    - Tables and Figures
    - References
    - Grammar
    - Publication Process

BAMS APA Style Requirements and Tips

- **Use 12-point Arial font only.**
- Use all resources provided in the Supervised Research course, including the APA 7th ed Student Paper Setup Guide.
- All resources provided are for APA Style **7th Edition**, introduced in 2019. Be careful not to follow samples or information based on prior editions.
- Look out for default page settings, which are usually different from APA style.
- Make sure your ruler is visible at the top of the page, so that you can easily see if margins and paragraph indents are correct. Check Ruler in the View menu.
- Look out for extra lines and spacing. Your Spacing settings should look like this:


Paragraph
Indents and Spacing
Line and Page Breaks
General
Alignment:
Left
Outline level:
Body Text
Collapsed by default
Indentation
Left:
0"
Special:
By:
Right:
0"
Hanging
0"
Mirror indents
Spacing
Before:
0 pt
Line spacing:
At:
After:
0 pt
Single
Don't add space between paragraphs of the same style
Preview
Look out for extra lines and spacing. Your settings should look like this
Tabs...
Set As Default
OK
Cancel

Writing Tips

- Be succinct. Convey information in a clear and complete fashion while using as few words as possible.
- Write using formal, professional, technical language. Do not write as you speak.
- Focus on observable behavioral. Avoid referencing private events such as anxiety, wanting, thinking, etc. Instead, describe public behaviors that suggest such private behaviors.
- Report only the facts. Avoid the use of adverbs such as, sadly, surprisingly, fortunately when reviewing the literature.
- When feedback is provided or a correction is made to your paper, apply it throughout your paper, even if it is not noted again.
- PROOFREAD YOUR WORK MULTIPLE TIMES

Writing Resources

Clear and concise professional writing can be a difficult skill to master, particularly if one has not had much practice and feedback. Students are highly encouraged to take advantage of writing resources available through the BAMS program and university.

BAMS Program Writing Tutor

A BAMS writing tutor is available to assist students with written assignments. The role of the tutor is to provide feedback to improve writing skills and the use of APA style. The writing tutor will not grade assignments nor provide information to course instructors that will be used for grading purposes. Students may request assistance from the writing tutor at any time. It may be essential for some students to improve their writing skills in order to successfully complete the capstone project. In these cases, the students will be referred to the writing tutor by the course instructor. Students who receive a referral must make an appointment with the writing tutor as soon as possible. Appointments may be held in person or remotely, as agreed to by the writing tutor and the student. Contact information for the is posted on the Home page of the course Canvas.

Center for Excellence in Writing

The FIU Center for Excellence in Writing (CEW) offers a variety of tools and services to help students develop writing skills. All students are encouraged to visit the web page (linked below) and to take advantage of this valuable resource. It may be essential for some students to improve their writing skills in order to successfully complete the capstone project. In these cases, the students may be referred to the CEW by the course instructor and/or the BAMS Program Writing Tutor. Students who receive a referral must make an appointment with the CEW as soon as possible.
Center for Excellence in Writing | College of Arts, Sciences & Education | Florida International University (fiu.edu) (Links to an external site.)

FIU Library

The FIU Library offers resources and services to aid in the completion of your literature research.
ALL GUIDES - FIU Libraries at Florida International University (Links to an external site.)

Time Management
The Office of Student Affairs offers resources to assist students with planning and managing their time.
https://studentaffairs.fiu.edu/health-and-fitness/student-health/healthy-living/resources/time-management/index.php (Links to an external site.)

How to Avoid Plagiarism

Plagiarism is considered Academic Misconduct by the University, is not tolerated, and can lead to dismissal from the program if not properly addressed. Academic Misconduct is defined as: "Any act or omission by a Student, which violates the concept of Academic Integrity and undermines the academic mission of the University in violation of the Code[1]." This means that even by inadvertently committing plagiarism, you may still liable for Academic Misconduct. In other words, you are responsible for actively preventing any instances of plagiarism and other forms of academic misconduct. As members of the Behavior Analysis Master's Program you are expected to uphold the standards of academic integrity and student conduct outlined in the university Student Affairs' Webpage.

Plagiarism[2]

1. The deliberate use and appropriation of another's work without any indication of the source and the representation of such work as the student's own.
2. Assisting another Student in the deliberate use and appropriation of another's work without any indication of the source and the representation of such work as the student's own.

Avoid plagiarism by understanding what it is, and by learning how to effectively paraphrase. The following online resources are available to help you identify plagiarism, practice paraphrasing, and even test your own work to determine if it meets criteria to avoid being flagged for plagiarism.

[1] Florida International University - Digital Communications. (n.d.). FIU and Plagiarism. Retrieved December 07, 2020, from https://case.fiu.edu/opportunities/internships-jobs/clinical-experiences/plagiarism-tutorial/fiu-and-plagiarism/index.html

[2] Florida International University - Web Communications. (n.d.). Student Conduct and Honor Code. Retrieved December 07, 2020, from https://studentaffairs.fiu.edu/get-support/student-conduct-and-academic-integrity/student-conduct-and-honor-code/index.php

Plagiarism Detection Software

Be aware that your professor may use plagiarism detection software (PDS) such as Turnitin, to help them identify improperly sourced materials. If you have concerns with the instructors' use of PDS, please communicate directly with your instructor or program administration.

Campus Resources

There are excellent resources on campus for students who need additional support in mastering the art of academic writing. Be proactive and take advantage of these resources prior to turning in your assignments to avoid potential mishaps.

The FIU Library provides a variety of online resources to help prevent plagiarism**.**

The Center for Excellence in Writing provides online resources for everything from how to use APA style, to writing your literature review and even using Refworks to help with building your references list. They also provide workshops and offer individual consultation for major writing projects, such as the capstone research project.

The Center for Academic Success provides tutoring and study tips and guides and has a video on paraphrasing and other useful skills for graduate students.

Scribbr

The Scribbr YouTube Channel offers a series of very helpful videos to assist you throughout the process of writing your research paper.

Summary of Project Guidelines

General

1. Your final written product is expected to be of sufficient quality for publication in a peer-reviewed journal.
2. Discuss all aspects of your project in advance and regularly with your practicum site supervisor.
3. Your research may begin only after receiving approval from the FIU IRB and/or the BAMS program.
4. You will have approximately 20 weeks to complete your research.

Topic Selection

1. Identify topics of interest to you. Consider gaps in the literature and inconsistent research results.
2. Consult with your Practicum Site Supervisor (PSS) and Program Research Supervisor (PRS).

Target Behavior Selection

1. Select a target behavior that is readily available for measurement.
2. Select a target behavior for which the relevant functional variables can be controlled.
3. Select a socially valid behavior.

Participant Selection

1. Your PSS should help you identify multiple individuals who could benefit from participating in your study. A minimum of three participants are required.
2. Participants may be the primary recipient of behavior analysis services, caregivers, or agency staff.
3. Select participants who are likely to remain with the agency for the duration of your project (three semesters).
4. Select participants who reliably keep appointments and follow treatment recommendations.
5. Do not select participants who have a recent history of self-injurious behavior or physical aggression toward others severe enough to cause injury.
6. Individuals with a history of physically damaging behaviors (toward self, others, or property) should not be selected as participants.

Behavior Change Program

1. The contingent application, removal or change in a stimulus condition for the purpose of reducing a target behavior (i.e., punishment) is not allowed.
2. Aversive antecedent manipulations and negative reinforcement contingencies may not be used.
3. Reduction of target behaviors must be based on differential reinforcement contingencies.

4. The intervention should seek to extend the existing literature to a new behavior, participant group (e.g., age or diagnosis), environmental condition (e.g., individual vs. group instruction) or procedure.

Experimental Design & Data Collection

1. A single-case experimental design must be used. Multiple probe designs are discouraged.
2. Data must be quantitative.
3. Data should be collected as frequently as possible.
4. Data may be collected by the student, caregiver, or agency employee.

Treatment Fidelity

1. As the primary experiments, the student is responsible for implementing procedures, to the fullest extent possible. When it is necessary for others (research assistants) to implement procedures, those individuals must be trained.
2. Training procedures must be included in the methods section of the capstone project paper.
3. Any materials used in the training, such as written protocols and slide presentations, must be included as appendices to the capstone project paper.
4. Research assistants reach a performance criterion of 100% before they may begin to implement procedures.
5. When the student is the only researcher to implement procedures, treatment fidelity should be collected by a trained observer whenever possible.
6. Treatment fidelity data should be collected for at least 25% of all data collected in each phase of the study.

Reliability

1. Each study must include the participation of at least one secondary observer, for purposes of collecting reliability (interobserver agreement) data.
2. Secondary observers must be trained prior to collecting data, and the training procedures must be included in the methods section of the capstone project paper.
3. Written training materials must be included as appendices to the capstone project paper.
4. Training should continue until interobserver agreement (IOA) reaches at least 80%.
5. IOA should be calculated for at least 25% of all data collected, in each phases of the study.
6. Anyone implementing procedures must be trained to criterion.
7. All training procedures must be included in the methods section.

Social Validity

1. Social validity should be assessed via objective measures when possible. Subjective measures such as questionnaires should not be administered by the experimenter.