#### **Independent Field Instruction Option**

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**ADAPTED WITH PERMISSION FROM**: CSUN STRUCTURED SUPERVISION FOLDER REVISED NOVEMBER, 2013 ELLIE KAZEMI, PH.D, BCBA-D & PETER ADZHYAN, PSY.D, LEP, BCBA-D, ASHLEY RICE CSUN BCP PROGRAM

#### **List of Competencies**

- 1. Use the professional and ethical guidelines with colleagues and clients
- 2. Develop and use behavior measurement methods and record and analyze data
- 3. Conduct behavior assessments (e.g., Functional Behavior Assessment, Preference Assessment, Reinforcer Assessment)
- 4. Develop evidence-based intervention plans based on assessment results and baseline data
- 5. Design and implement skill acquisition procedures based on initial assessment (e.g., design a language acquisition program based on VB-MAPP results)
- 6. Design and implement behavior reduction procedures
- 7. Program and probe for generalization and maintenance
- 8. Conduct ongoing assessment of interventions
- 9. Train another individual to conduct a procedure
- 10. Develop and present a training module to individuals who are not familiar with behavior analysis

For each competency, the supervisee should read related documents, offer a brief written summary of major concepts involved, and be prepared to discuss the reading with supervisor. Upon meeting the competency, the supervisee should provide a brief summary of how each objective was achieved. This should occur prior to obtaining the signature of the supervisor and moving to the next competency.

The directions and readings for competencies included here are suggestions to help narrow the focus of supervision activities and enable supervisors to have systematic procedures. However, much is left to the discretion of the supervisor. There is flexibility in the format of how the response to each competency is produced since each supervisee may have different opportunities in different situations.

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- xxi. VI. Design and implement behavior reduction procedures Error! Bookmark not defined.
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- xxiii. VI. Design and implement behavior reduction procedures MPP r **Error! Bookmark not defined.**

#### 1. BACB Documents & Guidelines

We recommend you review the following documents with your supervisor and keep copies of these documents accessible for quick reference (click on the documents to access the documents). You may need to locate the documents on the <a href="bacb.com">bacb.com</a> as they may not be updated.

- Supervisor Training Curriculum Outline
- BACB Guidelines for Responsible Conduct for Behavior Analysts
- BACB Experience Standards
- Most recent BACB Task List Content
- Health Plan Coverage of Applied Behavior Analysis Treatment for Autism Spectrum Disorder

### I. Use the professional and ethical guidelines with colleagues and clients

1: Demonstrate knowledge of ethical, responsible, professional and disciplinary guidelines

I. Supervision contract

- **A.** Review BACB website on "Standards of Conduct", "Appropriate Activities", "Appropriate Clients", "Supervision Qualification" and "Nature of Supervision"
- **B.** Develop and sign a contract between supervisor and supervisee
- a. Click Here for Sample Contracts
- b. The contract must specify each party's specific role (<u>click here for recommended responsibilities for supervisor and supervisee</u>)
- C. Maintain a copy of the Supervision contract in your file

II.	Review BACB® ethical guidelines		
	A. Review and discuss with supervisor  Responsible conduct of a behavior analyst		
	· The behavior analyst's responsibility to clients		
	· Assessing behavior		
	· The behavior analyst and the individual behavior change program		
	· The behavior analyst as teacher and/or supervisor		
	· The behavior analyst and the workplace		
	· The behavior analyst's ethical responsibility to the field of behavior analysis		
	· The behavior analyst's responsibility to colleagues		
	· The behavior analyst's ethical responsibility to society		
	· The behavior analyst and research		
	B. Obtain Supervisors Signature certifying that you have read and discussed with your supervisor all ethical guidelines listed above		
	· Supervisor Name:	Signature:	Date:
III.	Review BACB task list-4 <sup>th</sup> edition		
	A. Use suggested readings to learn how the Task List was formulated, training and certification matters related to behavior analysts, and the importance of maintaining the integrity and future of BCBA certification		
	<b>B.</b> Obtain Supervisors Signature certifying that you have read and discussed with your supervisor the BACB 4 <sup>th</sup> Edition task list		
	· Supervisor Name:	Signature:	Date:
IV.	Topics for Group Supervision		

#### A. Read Bailey & Burch (2009)

- a. Chapter 1 (First Impressions Count, pages 3-6)
- b. Chapters 17 & 18 (Time Management & Become a Trusted Professional)
- c. Chapters 20 (Knowing when to Seek Help-Feedback)
  - d. Chapter 8 (Interpersonal Communication)

#### B. Discuss assigned readings

- a. Importance of feedback
- b. How to seek and respond to feedback
- c. How to become a trusted professional
- d. Interpersonal communication skills
- C. Establish Performance expectations (should be placed in supervision contract)
- D. Make professional conduct performance goals
  - a. Have supervisee develop short-term and long-term objective and measureable goals
  - b. Review and revise goals, if necessary, for supervision
  - c. Offer feedback on professional conduct goals throughout supervision
  - d. Make note of improvements

#### > Suggested Readings

- Bailey, J., & Burch, M. (2011). Ethics in Behavior Analysis (2nd ed). New York, NY: Routledge.
- Bailey, J. S., & Burch, M. R. (2009). 25 Essential Skills and Strategies for the Professional Behavior Analyst: Expert Tips for Maximizing Consulting Effectiveness. New York: NY, Routledge
- Cooper J.O, Heron T.E, Heward W.L. (2007). Applied Behavior Analysis (2nd ed.). Upper Saddle River, NJ: Pearson.
- Shook, G.L., Johnston, J.M., & Melichamp, F. (2004). Determining Essential Content for Applied Behavior Analyst Practitioners. The Behavior Analyst, 27, 67-94.
- Shook, G.K., Rosales, S.A., & Glenn, S. (2004). Certification and Training of Behavior Analyst Professionals. Behavior Modification, 26 (1), 27-48.
- Shook, G., & Neisworth, J. (2005). Ensuring Appropriate Qualifications for Applied Behavior Analyst Professionals: The Behavior Analyst Certification Board. Exceptionality, 13(1), 3-10.

### I. Use the professional and ethical guidelines with colleagues and clients

#### 2: Demonstrate knowledge of HIPPA and confidentiality rules

#### I. Review BACB® ethical guidelines

- **A.** Review and discuss with supervisor
  - · The behavior analyst's responsibility to clients

# HIPPA and confidentiality A. Obtain information regarding HIPPA Guidelines and Confidentiality that pertain to the state you are going to complete your supervised BACB competences B. Obtain information regarding HIPPA Guidelines and Confidentiality that pertain to your current place of work

- **C.** Discuss with supervisor:
  - Record keeping
  - E-MAIL and any electronic transmission of confidential information
  - Use of smart phones and protection of electronic files

#### III. Consent

- **A.** Discuss with supervisor: Informed, surrogate, guardian, and conservator consents
  - **B.** Discuss with supervisor the difference between consent and assent. Discuss when consent and assent should be used
  - **C.** Obtain and review consent and assent forms used at your current place of employment or internship (<u>Click here to see examples of Consent and Assent Forms</u>)
- **D.** Place the sample consent and assent forms in your file

#### IV. Obtain informed consent

- A. Before your first use of Consent procedure
  - a. Role-play with supervisor the following:
    - i. Introducing the forms
    - ii. Explaining the forms using non-technical verbal behavior iii. Obtaining the signature from client(s)
- **B.** Obtain immediate feedback and practice till criteria set by supervisor is met

#### > Suggested Readings

- Bailey, J., & Burch, M. (2011). Ethics in Behavior Analysis (2nd ed). New York, NY: Routledge.
- Bailey, J. S., & Burch, M. R. (2009). 25 Essential Skills and Strategies for the Professional Behavior Analyst: Expert Tips for Maximizing Consulting Effectiveness. New York: NY, Routledge
- Cooper J.O, Heron T.E, Heward W.L. (2007). Applied Behavior Analysis (2nd ed.). Upper Saddle River, NJ: Pearson.

# II. Develop and use behavior measurement methods, record and analyze data

	(Click to see sample of a Performance Monitoring Tool)		
	3: Select & define target behavior for change		
I.	Review BACB® ethical guidelines		
	A. Review and discuss with supervisor  • Ethical practices in selecting and assessing potential target behaviors		
II.	Develop and use worksheets to prioritize target behaviors		
	<b>A.</b> Evaluating the social significance of potential target behaviors		
	<b>B.</b> Prioritizing potential target behaviors		
III.	Define target behaviors in observable and measurable terms (I-01)		
	<b>A.</b> Define behavior topographically (define at least 10 different behaviors) in measurable and observable terms		
	1. Discuss definitions with supervisor and make necessary changes		
	2. Include the final written operational definitions in your file		
	<b>B.</b> Define behavior functionally (define at least 10 different behaviors) in measurable and observable terms		
	1. Discuss definitions with supervisor and make necessary changes		
	2. Include the final written operational definitions in your file		
	C. Describe and explain behavior, including private events, in behavior-analytic (non-mentalistic) terms (G-05)		
	➤ Suggested Readings		

- Bailey, J., & Burch, M. (2011). Ethics in Behavior Analysis (2nd ed). New York, NY: Routledge.
- Cooper J.O, Heron T.E, Heward W.L. (2007). Applied Behavior Analysis (2nd ed.). Upper Saddle River, NJ: Pearson.
- O'Neil, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Sorey, K., Newton, J. S. (1997). Functional Assessment and Program Development for Problem Behavior: A Practical Handbook. Pacific Grove, Ca.: Brooks/Cole Publishers
- Umbreit, J., Ferro, J., Liaupsin, C. J., & Lane, K. L. (2006). Functional Behavioral Assessment and Function\_Based Intervention: An Effective, Practical Approach. Englewood Cliffs, NJ: Prentice Hall.
- Wolf M.M., (1978). Social Validity: The Case for Subjective Measurement or How Applied Behavior Analysis is Finding its Heart. *Journal of Applied Behavior Analysis*, 11, 203-214.

# II. Develop and use behavior measurement methods, record and analyze data

(Click to see sample of Performance Monitoring Tool)

### 4: Measure target behaviors using various direct observation measurement methods to collect baseline data

- I. Review BACB® ethical guidelines
  - **A.** Review and discuss with supervisor
    - $\cdot$  Ethical practices relevant to data collection and data based decision making
  - II. Select a *measurement system* to obtain representative data given the dimensions of the behavior and the logistics of observing and recording (H-01)
  - A. Create a basic file for the advantages and disadvantages of using continuous and discontinuous measurement procedures
    - Discuss the summary table with supervisor and include the final product in your file
  - B. When conducting assessments or developing treatment plans, select an appropriate measurement method and design data collection forms for the measurement methods listed below
    - Discuss your selection and the data collection forms with supervisor, obtain feedback and include the final product in your file
  - **➤** Design continuous measurement procedures (A-12)
    - 1. Frequency/Rate
    - 2. Duration

	3. Latency		
	4. IRT		
	5. Percent of occurrence		
	6. Trials to criterion		
3	➤ Design discontinuous measurement procedures (A-13)		
	7. Partial interval recording		
	8. Whole interval recording		
	9. Momentary time sampling		
	10. Planned activity check		
	11. Permanent product (e.g. number of math facts completed)		
(H- 02)  A. When conducting assessments or monitoring progress during intervention phase, select appropriate observation periods and collect baseline or intervention data using appropriate			
	<ul> <li>measurement procedure</li> <li>Discuss your selection with supervisor and obtain feedback</li> <li>B. Collect data and share the results with supervisor</li> <li>Evaluate if changes need to be made to your data sheet and make necessary changes</li> <li>C. Graph the results and obtain feedback from supervisor</li> </ul>		
(	<ul> <li>measurement procedure</li> <li>Discuss your selection with supervisor and obtain feedback</li> <li>B. Collect data and share the results with supervisor</li> <li>Evaluate if changes need to be made to your data sheet and make necessary changes</li> </ul>		
(	<ul> <li>measurement procedure         <ul> <li>Discuss your selection with supervisor and obtain feedback</li> </ul> </li> <li>B. Collect data and share the results with supervisor         <ul> <li>Evaluate if changes need to be made to your data sheet and make necessary changes</li> </ul> </li> <li>C. Graph the results and obtain feedback from supervisor</li> </ul>		
3	<ul> <li>measurement procedure         <ul> <li>Discuss your selection with supervisor and obtain feedback</li> </ul> </li> <li>B. Collect data and share the results with supervisor         <ul> <li>Evaluate if changes need to be made to your data sheet and make necessary changes</li> </ul> </li> <li>C. Graph the results and obtain feedback from supervisor</li> <li>Implement continuous measurement procedures (A-12)</li> </ul>		
A-02	<ul> <li>measurement procedure         <ul> <li>Discuss your selection with supervisor and obtain feedback</li> </ul> </li> <li>B. Collect data and share the results with supervisor         <ul> <li>Evaluate if changes need to be made to your data sheet and make necessary changes</li> </ul> </li> <li>C. Graph the results and obtain feedback from supervisor</li> <li>Implement continuous measurement procedures (A-12)</li> <li>1. Measure frequency/rate</li> </ul>		
A-02 A-03	measurement procedure  • Discuss your selection with supervisor and obtain feedback  B. Collect data and share the results with supervisor  • Evaluate if changes need to be made to your data sheet and make necessary changes  C. Graph the results and obtain feedback from supervisor  ► Implement continuous measurement procedures (A-12)  1. Measure frequency/rate  2. Measure duration		
A-02 A-03 A-04	measurement procedure  • Discuss your selection with supervisor and obtain feedback  B. Collect data and share the results with supervisor  • Evaluate if changes need to be made to your data sheet and make necessary changes  C. Graph the results and obtain feedback from supervisor  Implement continuous measurement procedures (A-12)  1. Measure frequency/rate  2. Measure duration  3. Measure latency		
A-02 A-03 A-04 A-05	measurement procedure  • Discuss your selection with supervisor and obtain feedback  B. Collect data and share the results with supervisor  • Evaluate if changes need to be made to your data sheet and make necessary changes  C. Graph the results and obtain feedback from supervisor  Implement continuous measurement procedures (A-12)  1. Measure frequency/rate  2. Measure duration  3. Measure latency  4. Measure IRT		
A-02 A-03 A-04 A-05 A-06 A-07	measurement procedure  • Discuss your selection with supervisor and obtain feedback  B. Collect data and share the results with supervisor  • Evaluate if changes need to be made to your data sheet and make necessary changes  C. Graph the results and obtain feedback from supervisor  Implement continuous measurement procedures (A-12)  1. Measure frequency/rate  2. Measure duration  3. Measure latency  4. Measure IRT  5. Measure percent of occurrence		
A-02 A-03 A-04 A-05 A-06 A-07	measurement procedure  • Discuss your selection with supervisor and obtain feedback  B. Collect data and share the results with supervisor  • Evaluate if changes need to be made to your data sheet and make necessary changes  C. Graph the results and obtain feedback from supervisor  Implement continuous measurement procedures (A-12)  1. Measure frequency/rate  2. Measure duration  3. Measure latency  4. Measure IRT  5. Measure percent of occurrence  6. Use trials to criterion		
A-02 A-03 A-04 A-05 A-06 A-07	measurement procedure  • Discuss your selection with supervisor and obtain feedback  B. Collect data and share the results with supervisor  • Evaluate if changes need to be made to your data sheet and make necessary changes  C. Graph the results and obtain feedback from supervisor  Implement continuous measurement procedures (A-12)  1. Measure frequency/rate  2. Measure duration  3. Measure latency  4. Measure IRT  5. Measure percent of occurrence  6. Use trials to criterion  Implement discontinuous measurement procedures (A-13)		

10. Measure behavior by permanent product

#### **➤** Suggested Readings

- Baily, J., & Burch, M. (2011). Ethics in Behavior Analysis (2nd ed). New York, NY: Routledge.
- Cooper J.O, Heron T.E, Heward W.L. (2007). Applied Behavior Analysis (2nd ed.). Upper Saddle River, NJ: Pearson.
- Gast, D.L. (2010). Single Subject Research Methodology in Behavioral Sciences. New York, NY, Routledge.
- Johnson, J. M., & Pennypacker, H. S. (2008). Strategies and Tactics in Behavioral Research (3<sup>rd</sup> Ed). New York, NY: Routledge

# II. Develop and use behavior measurement methods, record and analyze data

#### 5: Assess quality of behavioral measurement (Accuracy & Reliability)

- I. Create a basic table that summarizes threats to measurement accuracy, validity and reliability
  - **A.** Include a table in your file that summarizes the variables that could threaten:
    - Validity of behavioral data
    - Reliability of behavioral data
    - Accuracy of behavioral data

#### II. Assess and interpret inter-observer agreement (A-08)

- A. Determine appropriate method to obtain (sample) inter-observer data for given data collection method

   Discuss the chosen method with the supervisor and make necessary changes
- **B.** Create a summary table that includes
  - Type of IOA
  - Method of calculation for each type of IOA
  - Acceptable level of IOA
  - Format for reporting IOA

#### C. Conduct, interpret and report inter-observer agreement

- When collecting baseline or intervention data use IOA to evaluate the accuracy and reliability of data and measurement procedures
- When supervising implementation of treatment plans use IOA to evaluate the accuracy and reliability of data collection
- Calculate IOA using appropriate method for given data & report the IOA data
- Use IOA data to make changes to measurement procedures or use Behavior Skills Training to improve data collection skills of implementers

Use Total Count IOA and report the results
Use Total Duration IOA and report the results
Use Mean Duration per occurrence IOA and report the results
Use Interval by Interval IOA and report the results
Use Scored and Unscored Interval IOA and report the results
Use Trial by Trial IOA and report the results

#### > Suggested Readings

- Baer, D. M. (1977). Reviewer's comment: Just because it's reliable doesn't mean that you can use it. *Journal of Applied Behavior Analysis*, 10, 117–119.
- Johnson, J. M., & Pennypacker, H. S. (2008). Strategies and Tactics in Behavioral Research (3<sup>rd</sup> Ed).
   New York, NY: Routledge
- Repp, A. C., Deitz, D. E. D., Boles, S. M., Deitz, S. M., & Repp, C. F. (1976). Technical article:
   Differences among common methods for calculating inter-observer agreement. *Journal of Applied Behavior Analysis*, 9, 109-113.
- Watkins, M.W., & Pacheco, M. (2000). Inter-observer Agreement in Behavioral Research: Importance and Calculation. *Journal of Behavioral Education*, 10, 205–212.

# II. Develop and use behavior measurement methods, record and analyze data

#### 6: Graph & analyze gathered information

#### I. Review BACB® ethical guidelines

- **A.** Review ethical guidelines relevant to data collection, visual display and analysis
- **B.** Discuss the guidelines with supervisor

#### II. Design, plot, and interpret data

	A. Plot data using equal-interval graphs (A-
	10) o Use Excel or other graphing
	tools to generate
	■ Bar Graphs
	<ul> <li>Multiple Baseline Graphs</li> </ul>
	Multiple Probe Graphs
	- ABAB Graphs
	Alternating Treatments
	· Multi-element
	· Simultaneous
	Chaining Criterion Graphs
В	Plot and interpret data using Standard Celeration Charts (SCC)
C	Plot data using a cumulative record (A-11)
D	Interpret visually displayed data using baseline logic (A-10 and 11)
	o Draw level and trend lines
	o Evaluate changes in level, trend, and variability
	o Measure Effect Size using
	■ Points of Non-Overlap
	■ Dual-Criterion Method
E	. Print and place all graphs in your file

- Bailey, J., & Burch, M. (2011). Ethics in Behavior Analysis (2nd ed). New York, NY: Routledge.
- Cooper J.O, Heron T.E, Heward W.L. (2007). Applied Behavior Analysis (2nd ed.). Upper Saddle River, NJ: Pearson.
- Dixon, M. R., Jackson, J. W., Small, S. L., Horner–King, M.J., Mui Ker Lik, N., Garcia, Y., & Rosales, R. (2009). Creating single–subject design graphs in Microsoft Excel 2007. *Journal of Applied Behavior Analysis*, 42, 277-293.
- Fisher, W. W., Kelley, M. E., & Lomas, J. E. (2003). Visual aids and structured criteria for improving visual inspection and interpretation of single-case designs. *Journal of Applied Behavior Analysis*, 36, 387–406.
- Gast, D.L. (2009). Single Subject Research Methodology in Behavioral Sciences. New York, NY: Routledge.
- Hagopian, L. P., Fisher, W. W., Thompson, R. H., Owen-DeSchryver, J., Iwata, B. A., & Wacker, D.
  - P. (1997). Toward the development of structured criteria for interpretation of functional analysis data. *Journal of Applied Behavior Analysis*, 30, 313–326.
  - · Johnson, J. M., & Pennypacker, H. S. (2008). Strategies and Tactics in Behavioral Research (3<sup>rd</sup> Ed). New York, NY: Routledge
  - · Kazdin, A.E. (2011). Single-Case Research Designs: Methods for Clinical and Applied Settings (2<sup>nd</sup> ed.). New York: Oxford University Press.

#### XI. Conduct behavior assessments (e.g., Functional Behavior Assessment, Preference Assessment, Reinforcer Assessment)

#### 7: Conduct comprehensive functional behavior assessments

Click here for examples of Performance Monitoring Tools for conducting functional analysis (Attention, Escape, Play Conditions) Click here for example of FBA Rubric

- I. Review BACB® ethical guidelines 1.0, 2.0 and 3.0 and discuss with supervisor
  - A. Ethical practices in conducting behavior assessments
  - **B.** Discuss with supervisor the ethical practices and the importance of practicing within one's limits of professional competence and obtaining consultation, supervision, training, or making referrals as necessary
- II. Conduct a preliminary assessment in order to identify the referral problem (G-03)
  - A. Obtain informed consent for assessment (Click here for examples of Informed Consents)
  - B. Identification of the problem

- 1. Conduct Indirect Assessment (<u>Click here for example of Performance Monitoring Tool</u>); (<u>Click here for interviewing tool</u>)
  - Review records and available data (G-01)
  - Conduct interviews using semi structured format (e.g. FAI)
  - Use rating scales
    - i. FAST
    - ii. MAS iii. SIT
  - Consider biological/medical variables that may be affecting the client (G-02)
  - Include completed Indirect Assessment forms and notes on your interview under your file
- 2. Observe the client in the natural environment
  - · Identify variables that could have evocative effect on target behaviors

#### C. Develop a hypothesis statement based on the preliminary assessment of the client

For each target behavior identify potential

- i. Biological/medical variables that may affect the client
- ii. Immediate antecedents
- iii. iii. Consequences

#### D. Define target behaviors in observable and measurable terms

- ➤ Operationally define target behaviors in measurable and observable terms before conducting direct assessment (I-01)
- ➤ Discuss the definitions with supervisor and make necessary changes

#### III. Use direct observation to collect baseline data

- **A.** Select observation periods to obtain baseline data given the dimensions of the behavior and the logistics of observing and recording (H-01)
  - Use Scatter Plot data to select observation periods, or
  - Use information obtained from interviews to select observation periods (H-02)
- **B.** Select a measurement system to obtain baseline data given the dimensions of the behavior and the logistics of observing and recording
  - ➤ Create a basic table (see Table 4.1 in Cooper) incorporating:

	<ul> <li>Fundamental measures (e.g., count, duration, temporal</li> </ul>				
locus) o Procedures for measuring behavior (e.g.,					
event recording, time sampling)					
<ul> <li>Examples of behaviors you may measure using each</li> </ul>					
	method and procedure of data collection				
	➤ For each measurement system develop data recording sheets to be				
	used for data collection				
	Directly observe target hehavior(s)				
	C. Directly observe target behavior(s)				
	Use data recording sheet to obtain baseline data given the dimensions of the behavior.				
	Obtain baseline data				
	O Discuss baseline data with supervisor				
	Conduct IOA  Find the state of the stat				
	<ul> <li>Evaluate if changes need to be made to your data collection method or recording sheets</li> </ul>				
	D. Select and use a data display that effectively communicates relevant quantitative relations (H-03)				
	<ul> <li>Use excel to generate graphs to display results of baseline data</li> <li>Graphs must include o Correctly labeled Y and X axis o Title         o Correct data points and markers o         Figure captions</li> <li>Analyze, and interpret observed data (H-04 and I-05)</li> </ul>				
IV.	Identify variables that influence the occurrence of problem behavior				
	A. Create a basic table that				
	includes uses and				
	limitations of o ABC				
recording and Functional					
	Analysis  Passage Dependent ABC recording				
	Response Dependent ABC recording  and Response Independent				
	and Response Independent (scheduled observation) ABC				
	(scheduled observation) ABC recording o Discuss with supervisor what				
	information can be obtained from ABC				
	recording				
	<ul> <li>Discuss with supervisor the many</li> </ul>				
	limitations of ABC recording and why				
	behavior analysts cannot draw accurate				
	conclusions regarding function when				
1 1	using descriptive assessments				

	<ul> <li>If ABC recording is used o Define environmental variables in observable and measurable terms (I-02) (e.g. define antecedents and consequences)</li> <li>Evaluate temporal relations between observed variables (H-05)</li> </ul>	
Click	resign and Conduct Functional Analysis (I-04) s here for examples of Performance Monitoring Tools for conducting functional sysis (Attention, Escape, Play Conditions)	
	➤ Create a table that includes o Various types of Functional Analysis (FA) Procedures o Examples of target behaviors assessed using each type of FA procedure o Limitations of each type of FA procedure	
	➤ Choose Functional Analysis Procedure appropriate for given target behavior o Discuss with supervisor the risks associated with the assessment o Discuss how to reduce the risks	
	o Propose FA procedure that is most appropriate for given	
	target behavior and minimizes risk to client	
	➤ Obtain informed consent to conduct FA from caregiver or client (see sample informed consent)	
	➤ Conduct Functional Analysis under direct supervision of supervisor o Graph and analyze the results of the functional analysis (I-05) o Evaluate temporal relations between observed variables (H-05)	
V. Wı	rite functional behavior assessment report	
> The	e FBA should include the following components	

- A. Reason for referral (see scoring rubric)
- B. Background information
- C. Behavior-analytic description of reported target behaviors and environmental variables that could influence the target behaviors
- D. Hypothesis statement for each target behavior
- E. Baseline data
- F. Functional analysis results
- G. Summary
- H. Recommendations o Make recommendations regarding behaviors that must be established, maintained, increased, or decreased (I-06)
  - i. State intervention goals in observable and measurable terms (J-01)
  - o Identify potential interventions based on assessment results and the best available scientific evidence (J-02)
- · Include the completed FBAs in your file (De-identify client information first)

#### **>** Suggested Readings

- Bailey, J. S., & Burch, M. R. (2011). Ethics for Behavior Analysts (2<sup>nd</sup> ed.). New York, NY: Routledge.
- Dixon et.al., 2009. Creating Single-Subject Design Graphs in Microsoft Excel 2007. *JABA*, 42, 277293.
- Ellignson, Miltenberger, & Long (1999). A Survey of the Use of Functional Assessment Procedures in Agencies Serving Individuals with Developmental Disabilities, Behavior Interventions, 14, 187-198.
- Fox, J. & Davis, C. (2005). Functional Behavior Assessments in Schools: Current Research Findings and Future Directions, *Journal of Behavioral Education*, 14, 1-4.
- Hanley, G.P., 2012. Functional Assessment of Problem Behavior: Dispelling Myths, Overcoming Implementation Obstacles, and Developing New Lore. Behavior Analyst in Practice, 5, 54-72.
- Hanley, G.P., Iwata, B.A., McCord, B. E. (2003). Functional analysis of problem behavior: A review, *JABA*, 36 (2), 147-185.
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- Iwata, B.A., & Dozier, C.L. (2008). <u>Clinical Application of Functional Analysis Methodology</u>. Behavior Analysis in Practice, 1, 3-9.
- O'Neil, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Sorey, K., Newton, J. S. (1997). Functional Assessment and Program Development for Problem Behavior: A Practical Handbook. Pacific Grove, Ca.: Brooks/Cole Publishers
- Repp, A.C., & Horner, R. (1998). Functional Analysis of Problem Behavior: from Effective Assessment to Effective Support. Belmont, CA: Wadsworth Publishing.
- Thompson & Iwata (2007). A comparison of outcomes from descriptive and functional analyses of problem behavior, *JABA*, 40, 333-338.

• Touchette, P. E., MacDonald, R. F., & Langer, S. N. (1985). A scatter plot for identifying stimulus control of problem behavior. *Journal of Applied Behavior Analysis*, 18, 343–351.

## III. Conduct behavior assessments (e.g., Functional Behavior Assessment, Preference Assessment, Reinforcer Assessment)

#### 8: Conduct preference assessments (I-07)

Click here for examples of Performance Monitoring Tool for Paired-Choice & MSWO Assessment

#### I. Design and conduct preference assessments to identify putative reinforcers (A-14)

- A. Create a basic table that includes uses and limitations of: o Indirect preference assessment o Direct observation (Approach-based) o Systematic assessment of preferred stimuli o Multiple stimulus presentations without replacement (MSWO) o Multiple stimulus presentations with replacement (MSW) o Paired stimulus presentation (PS)
- **B.** Design and Conduct Preference Assessment
  - i. Taking the resources in the setting, type of stimuli being examined, and client's level of functioning into consideration, design a preference assessment for a client
  - ii. Discuss the designed preference assessment with supervisor
    - C. Conduct MSWO, PS and Approach-Based preference assessments under direct supervision of supervisor
  - **D.** Develop a performance monitoring checklist to evaluate the fidelity of preference assessments and have the supervisor use the form to rate and give feedback on conducting preference assessments
- E. Include the completed checklist with feedback in your file

#### II. Write summary of preference assessment results

- > Summarize the preference assessment results using the appropriate visual display
- Present the summary of the preference assessment results to the supervisor and make necessary changes
- ➤ Share the results with parents or teachers

#### Suggested Readings

- Daly, III et al., 2009. Evaluation of the multiple-stimulus without replacement preference assessment method using activities as stimuli. *Journal of Applied Behavior Analysis*, 42, 563-574.
- DeLeon, I. G., & Iwata, B. A. (1996). Evaluation of a multiple-stimulus presentation format for assessing reinforcer preferences. *Journal of Applied Behavior Analysis*, 29, 519-532.
- Hagopian, L.P., Long, E.S., Rush, K.S. (2004). Preference Assessment Procedures for Individuals with Developmental Disabilities, Behavior Modification, 28, 668-677.
- Piazza, Fisher, Roane, and Hilker (1999). Predicting and Enhancing the Effectiveness of Reinforcers and Punishers in Repp & Horner (Eds) Functional Analysis of Problem Behavior.

# III. Conduct behavior assessments (e.g., Functional Behavior Assessment, Preference Assessment, Reinforcer Assessment)

#### 9: Conduct reinforcer assessments

#### I. Design and conduct reinforcer assessments to identify putative reinforcers

#### A. Design a reinforcer assessment

- i. Conduct literature search and develop a procedure for reinforcer assessment
- ii. Discuss with supervisor the procedure and make necessary changes
- iii. Include the procedure in your file

#### **B.** Conduct a Reinforcer Assessment

- i. Conduct approved reinforcer assessment under direct supervision of supervisor
  - **C. Develop a performance monitoring checklist** to evaluate the fidelity of reinforcer assessments and have the supervisor use the form to rate and give feedback on conducting the assessment
- **D.** Include the completed checklist with feedback in your file and 24

#### II. Write summary of reinforcer assessment results

- Summarize the assessment results using the appropriate visual display
- Present the summary of the reinforcer assessment results to the supervisor and make necessary changes
- Share the results with parents or teachers

#### > Suggested Readings

- DeLeon, I. G., Fisher, W. W., Catter, V. R., Maglieri, K., Herman, K., & Marhefka, J. (2001).
   Examination of relative reinforcement effects of stimuli identified through pretreatment and daily brief preference assessment. *Journal of Applied Behavior Analysis*, 34, 463-473.
- Hagopian, L.P., Long, E.S., Rush, K.S. (2004). Preference Assessment Procedures for Individuals with Developmental Disabilities, Behavior Modification, 28, 668-677.
- Piazza, Fisher, Roane, and Hilker (1999). Predicting and Enhancing the Effectiveness of Reinforcers and Punishers in Repp & Horner (Eds) Functional Analysis of Problem Behavior.

# III. Conduct behavior assessments (e.g., Functional Behavior Assessment, Preference Assessment, Reinforcer Assessment)

#### **10:** Design and conduct parametric analysis (B-12)

#### I. Design and conduct parametric analysis

#### A. Design Parametric Analysis

- i. Conduct literature search and develop a procedure for parametric analysis for:
  - Assessing the effects of various schedules of reinforcement on target behaviors
  - Assessing the effects of various magnitudes of reinforcement on target behaviors
  - Assessing the effects of various tasks (for escape maintained behaviors) on target behaviors
- ii. Discuss with supervisor the proposed design and make necessary changes · Include the procedures in your file

#### **B.** Conduct a Parametric Analysis

- i. Conduct parametric assessment under the direct supervision of supervisor
- ii. Develop a performance monitoring checklist to evaluate the fidelity of parametric assessments and have the supervisor use the form to rate and give feedback on conducting the assessments
  - · Include the completed checklist with feedback in your file and 24

#### II. Write s ummary of assessment results

- i. Summarize the parametric assessment results using the appropriate visual display
- ii. Present the summary of the assessment results to the supervisor and make necessary changes
  - iii. Use the assessment results in treatment planning
  - iv. Share the results with parents or teachers

#### ➤ Suggested Readings

- Carr, J. E., Bailey, J. S., Ecott, C. L., Lucker, K. D., & Weil, T. M. (1998). On the effects of noncontingent delivery of differing magnitudes of reinforcement. *Journal of Applied Behavior Analysis*, 31, 313-321.
- DiGennaro Reed, F.D., Reed, D.D., Baez, C.N, & Maguire, N. (2011). A parametric analysis of errors of commission during discrete-trial training. *Journal of Applied Behavior Analysis*, 44, 611-615.
- Roscoe, E. M., Iwata, B. A., & Rand, M. S. (2003). Effects of reinforcer consumption and magnitude on response rates during non-contingent reinforcement. *Journal of Applied Behavior Analysis*, 36, 525–539.
- Sy J.R., & John C. Borrero, J.C. (2009). Parametric analysis of presession exposure to edible and nonedible stimuli. *Journal of Applied Behavior Analysis*, 42, 833-837.

### IV. Develop evidence-based intervention plans based on assessment results and baseline data

11: Obtain, summarize, and evaluate research articles as part of recommendations & development of intervention plans

I. Review and interpret articles from the behavior-analytic literature (B-02)

- **A.** Obtain and summarize research articles
  - i. Search behavior analytic journals for peer reviewed articles that address:
    - i. Problem behaviors with similar functions as those identified in treatment plans that you are implementing;
      - Or
    - ii. Problem behaviors with similar functions that you are developing a treatment plan for
    - iii. Skill acquisition for specific skill acquisition programs that you are implementing
      - Or
    - iv. Skill acquisition for specific skills that you are developing for skill acquisition programs
- **B.** Summarize the articles and include the summary for each article in your file
  - i. Summary should include:
    - i. Reference to the article in APA style
    - ii. Subjects
    - iii. Target behaviors with operational definitions
    - iv. Type of FBA conducted and results
    - v. Procedure used for intervention
    - vi. Results of the intervention
    - vii. Strengths and limitations of the articles
    - viii. How are you planning to use the information obtained from the article for your case

#### > Suggested Readings

- Carr J. E. and Briggs, A. M. (2010) Strategies for Making Regular Contact with the Scholarly Literature. Behavior Analysis in Practice, 3, 13–18.
- Dubuque, E.M. (2011). Automating Academic Literature Searches with RSS Feeds and Google Reader. Behavior Analysis in Practice, 4, 63-69.

### IV. Develop evidence-based intervention plans based on assessment results and baseline data

**12:** Recommend intervention strategies based on the assessment results and the best available scientific evidence

#### I. Recommend intervention strategies based on FBA results

- **A**. Taking the client's needs, best practices, available resources, FBA results and the best available scientific evidence into consideration, recommend conceptually systematic and effective strategies for intervention (see 11 for literature search) **B**. The recommendations should include and not be limited to:
- i. Antecedent interventions to address identified MOs and/or SDs and decrease problem behavior (provide reference) ii. Consequence based interventions to increase socially acceptable adaptive behaviors and decrease maladaptive behaviors (provide reference) iii. Appropriate initial reinforcement schedule and criteria for thinning
- iv. Shaping of replacement behaviors if not in the client's repertoire (e.g., FCT; provide reference)
- v. How to address the problem behavior if it occurs during intervention (provide reference) vi. Training of support staff and/or parents (provide reference)
- vii. Monitoring fidelity of implementation (provide reference) viii. Data collection, monitoring and data based decision making

#### II. Recommend intervention strategies based on skills assessment results (VB-MAPP results)

- **A.** Taking the client's needs, best practices, available resources, skills assessment results, and the best available scientific evidence into consideration, recommend conceptually systematic and effective strategies for skill acquisition interventions (see 11 for literature search)
- **B.** The recommendations should include and not be limited to:
  - i. Goals for each skill deficit
  - ii. Appropriate teaching methods for each skill (DTT, NET)
  - iii. Appropriate chaining method
  - iv. Appropriate method of programming for generality
  - v. Monitoring fidelity of implementation vi. Data collection, monitoring and data based decision making

#### **>** Suggested Readings

- Geiger, K.B., James E Carr, J. E., and LeBlanc, L.A. (2010). Function-Based Treatments for EscapeMaintained Problem Behavior: A Treatment-Selection Model for Practicing Behavior Analysts. Behavior Analyst in Practice, 3, 22-32.
- Hagopian, L.P., Boelter, E.W., David P Jarmolowicz, D.P. (2011). Reinforcement Schedule Thinning following Functional Communication Training: Review and Recommendations. Behavior Analyst in Practice, 4, 4–16.
- Iwata, B. A., Smith, R. G., & Michael, J. L. (2000). Current research on the influence of establishing operations on behavior in applied settings. *Journal of Applied Behavior Analysis*, 33, 411-418.
- O'Neil, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Sorey, K., Newton, J. S. (1997) Functional

Assessment and Program Development for Problem Behavior: A Practical Handbook. Pacific Grove, Ca.: Brooks/Cole Publishers.

- Parsons M. B., Reid D. H. (2012). Evidence-Based Staff Training: A Guide for Practitioners.
   Behavior Analyst in Practice, 5, 2-11.
- Reed, D. D., and Kaplan, B.A. (2011). The Matching Law: A Tutorial for Practitioners. Behavior Analyst in Practice, 4, 15-24.
- Van Houten, R., Axelrod, S., Bailey, J. S., Favell, J. E., Foxx, R. M., Iwata, B. A., & Lovaas, O. I. (1988). The right to effective behavioral treatment. *Journal of Applied Behavior Analysis*, 21, 381384.

### V. Design and implement skill acquisition procedures based on initial assessment

Click here for example of FBA Rubric

13: Conduct formal assessment using VB-MAPP or ABLLS-R

#### I. Review BACB® ethical guidelines 1.0, 2.0 and 3.0 and discuss with supervisor

- **A.** Ethical practices in conducting behavior assessments
- **B.** Discuss with supervisor the ethical practices and the importance of practicing within one's limits of professional competence and obtaining consultation, supervision, training, or making referrals as necessary

#### II. Conduct formal assessment

- A. Obtain informed consent for assessment
- **B.** Administer the entire VB-MAPP or ABLLS-R
  - C. Develop a performance monitoring form to evaluate the administration of VBMAPP or ABLLS-R and have the supervisor use the form to give you feedback on administration of VB-MAPP or ABLLS-R
    - i. Include the feedback in your file
- **D.** Score and graph completed VB-MAPP or ABLLS-R
- **E.** Discuss the results with the supervisor

#### III. Write assessment report

- **A.** The skills assessment report should include the following components
  - Reason for referral (see <u>scoring rubric</u>)
  - Background information
  - Results for each area assessed
  - Summary
  - Recommendations
- **B.** Include the final product in your file

### V. Design and implement skill acquisition procedures based on initial assessment

**14A:** Implement skills acquisition programs to teach verbal behavior, imitation and discrimination using direct instruction (e.g. DTT), precision teaching and/or natural environment/incidental teaching

#### I. Review BACB® ethical guidelines

- **A**. Before beginning to work with your first client (as an implementer) and before developing your first treatment plan, review the ethical guidelines to your work with the client
  - i. For example if you are implementing or developing behavior change plans that are not part of a research, you would review
  - i. 1.0 Responsible Conduct of a Behavior Analyst
  - ii. 2.0 The Behavior Analyst's Responsibility to Clients
  - iii. 3.0 Assessing Behavior
  - iv. 4.0 The Behavior Analyst and the Individual Behavior

**Change Program** 

v. 6.0 The Behavior Analyst and the Workplace vi. 8.0 The Behavior Analyst's Responsibility to Colleagues

#### II. Implement skill acquisition programs to teach verbal behavior

**A.** Implement the listed skill acquisition programs and obtain at least 90 % implementation fidelity on at least two consecutive performance monitoring checklists for each program o Include the completed performance checklists for each program

in your file

➤ Use the dimensions of applied behavior analysis (Baer, Wolf, & Risley, 1968) to evaluate whether interventions you are asked to implement are behavior analytic in nature (B-01)

BACB Task list #	Skill Acquisition Program	Teaching Method Discrete Trials (DTT) (F-03, D-08) Natural Environment /Incidental Teaching (NET/IT) (D-08) Precision Teaching (PT) (F-04) Other:()
D-10	Echoic Training	
	Mand Training with various topographies (at least two)	
D-11 and	Speech	
F-07 F-08	Pictures	
	ASL	
	Augmentative devices	
D-12	Tact Training	
	Actions	
	Objects	
	Color and shapes	
	Using prepositions	
	Using adjectives	
	Using adverbs	
	Using complete sentences	
	Other	
	Other	
	Other	
D-13	Intraverbal Training	
	What questions	

	When questions	
	Where questions	
	Who questions	
	Answering questions after reading a story	
	Other	
	Other	
	Other	
	Listener Training	
	Attending to speaker	
	Following one component actions	
	Following two component actions	
	Selecting a stimulus in an array	
D-14	Selecting stimuli based on Function, Feature and Class	
	Following instructions involving prepositions	
	Discriminating between different adjectives	
	Following two to three step directions	
	Other	
	Other	
III. I	mplement skill acquisition programs to teach	imitation and equivalence
	Motor Imitation Training	
	Gross motor actions (e.g. jumping)	
D-04	Fine motor actions (e.g. wiggle fingers)	
	Functional skills (e.g. using spoon)	
	Other	

	Other		
	Other		
	Stimulus Equivalence and Discrimination Training		
	Matching to sample		
E-02	Sorting		
E-06 E-13	Completing patterns and sequences		
	Other		
	Other		
	Other		
IV.	Use behavior change elements in skill acquisition programs		
E-11	Use Pairing Procedures to establish new conditioned reinforcers		
	Use appropriate schedules of reinforcement		
D-02	Initial Implementation Phase		
D-02	Thinning		
	Maintenance		
D-03	Use of Prompts and Prompt Fading		
E-12	Use Errorless Learning and Prompt Fading		
D-21	Use of differential reinforcement		

V. Design and implement skill acquisition procedures based on initial assessment .... (email terrimack@trinity-aba.com for the full document subject: "Structured Supervision Model")