Competencies and Education and Training Guidelines of the American Board of Cognitive and Behavioral Psychology for Applied Behavior Analysis within the Specialty of Cognitive and Behavioral Psychology

2014

Kevin D. Arnold, Ph.D., ABPP, Chair; Christopher Martell, Ph.D., ABPP; E. Thomas Dowd, Ph.D., ABPP and Dean McKay, Ph.D., ABPP

The Behavior Analyst Certification Board (BACB) requested that the American Board of Cognitive and Behavioral Psychology (ABCBP) establish a cooperative relationship regarding psychologists competent to provide ABA. The Behavioral and Cognitive Psychology Specialty Council (BCPSC) offered to facilitate the process, as the organization that speaks for all of Cognitive & Behavioral Psychology (C&BP) as a specialty (not specialists, but the specialty). ABCBP is the only specialty certifying board in professional psychology that includes ABA within its specialty practice. The C&BP specialty has included ABA since the foundation of the specialty and its specialty board, as evidenced by its application to the Commission for the Recognition of Specialties and Proficiencies in Professional Psychology (CRSPPP), its self-defining article in Professional Psychology: Research and Practice (Dowd, Chen, and Arnold, 2010), and in its competency book (Nezu, Martell, and Nezu, 2014). For example, Nezu, Martell and Nezu (2014) state: “These [assessment procedures] include historic methods of behavioral psychology, referred to as applied behavior analysis.... (p 66).” They further say “However, it is important to remember that competency in administering such interventions [ABA] should include a completion of requisite coursework regarding relevant learning
theories, readings, and supervised practicum experience specifically in applied behavioral analysis.... (p. 121). “

ABCBP identifies the specialty practice of ABA in professional psychological as one of its sub-areas within broader C&BP. Since the ABCBP’s inception, ABA has been identified in its definition and listed on its application used by prospective candidates for board certification. If an applicant for board certification in C&BP claims competencies in ABA, the application materials allow ABA to be designated. This paper sets forth guidelines for a) education and training and b) competencies for candidates who designate ABA on their applications to the ABCBP. The education and training guidelines ask that a candidate for board certification in C&BP meet either the Major Area of Study or Emphasis levels of opportunity at one or more of the stages of education identified in the attached Stages of Education and Training by Levels of Educational Opportunity in Specialties matrix, which relies on the Klepac et al. (2012) model.

The competencies, articulated later, form the basis of the examination (e.g., work sample, oral exam) of candidates’ practice of C&BP in the area of ABA. These competencies are an extension of the competencies in ABA identified in Nezu, Martell, and Nezu (2014).

The ABCBP establishes competencies in ABA to be evidenced by its certificate candidates, and/or certificate holders who hold themselves out as competent in ABA. ABCBP considers a candidate who holds a Board Certified Behavior Analyst credential from the BACB as demonstrating sufficient competencies to be examined by the ABCBP in the sub-area of ABA. Additionally, if a current ABCBP certificate
holder also holds the BCBA credential, the ABCBP considers that board certified psychologist to have demonstrated competency in ABA. Since many professional psychologists who hold ABCBP board certification are competent in ABA, but may not hold the BCBA-D, the ABCBP established guidelines that current ABCBP board certified psychologists may use to demonstrate ABA competency. In 2014, the ABCBP will survey its board certificate holders to identify those who have met the education and training guidelines (see below) and possess ABA foundational and functional competencies established by the ABCBP. Candidates who apply to the ABCBP after January 1, 2015, and who identifying ABA as an area of competency in their application materials for ABCBP board certification, will be asked to demonstrate the two ABCBP adopted guidelines for ABA competencies in a) ABA Specific Education and Training and b) ABA Specific Foundational and Functional Competencies.

**Education and Training.** The ABCBP adopts the existing Education and Training Guidelines in Cognitive and Behavioral Psychology (Klepac et al., 2012), which were vetted by the ABCBP, ABAI, and several other related organizations (including ABCT). The attached Matrix establishes how these guidelines should be operationalized at various opportunity levels for education and training across four stages of education and training (i.e., doctoral education, internship training, post-doctoral residency training, and/or post-licensure education and training). The ABCBP adopts that the levels of opportunity for a potential certificate candidate shall be either Emphasis or Major Area of Study, and can be obtained at one or more of the 4 stages of education. By using the Matrix (derived from the APA Education
and Training Guideline Taxonomy Matrix, American Psychological Association, 2012), the ABCBP will ask that future candidates identifying ABA as a competency use the Matrix as a guideline for determining adequate education and training for candidacy. If current certificate holders claim to be competent in Applied Behavior Analysis, they should document doctoral, internship, or post-doctoral education or training in ABA meeting the guidelines for Emphasis or Major Area of Study; and they should identify such education and training in a survey distributed by the ABCBP.

**Professional Psychological Competencies.** The ABCBP adopts core competencies in ABA to be demonstrated by candidates in their written worksample and in vivo examinations. These competencies are adopted from Baer, Wolf, and Risley (1968), Nezu, Martell, and Nezu (2013), and the Task List from the Behavior Analyst Certification Board (2012). Competencies from the BACB Task List covering professional and ethical competencies are not included, since professional psychological competencies in professional practice and ethics are already identified by ABCBP in its foundational competencies. Specific foundational competencies regarding ABA include Professional Identification (not only as a CBP psychologist, but also as one who identifies as an applied behavior analyst), Scientific Knowledge and Methods which include the pedagogy of ABA (e.g., recent literature from well regarded journals, theoretical knowledge current to ABA, and key reference texts), and Evidenced-Based Practice that includes incorporation of recent studies from the ABA literature into current work.
In addition to foundational competencies, the ABCBP will consider the candidates demonstration of functional competencies identified below. The competencies are linked to the ABPP New Benchmark Competencies as identified in parentheses following each competency (see as well Fouad, Grus, Hatcher, Kaslow, Hutchings, Madson, Collins, and Crossman, 2009):

Functional Competencies in ABA

**Derived from Bear, Wolf, and Risley (1968) Competencies:**

1. **Applied:** Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to conduct studies of behaviors that are reasonably shown to be relevant to either the patient or to the social context in which the patient exists. (Intervention or Consultation)

2. **Behavioral:** Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to define and analyze observed behaviors that are a) in need of change to improve the patient’s functioning, b) measurable in ways that are precise and reliable, and c) reflect behaviors emitted from the subject of the analysis (rather than from the observer) through assessment of observer reliability. (Assessment)

3. **Analytic:** Psychologists board certified in Cognitive and Behavioral Psychology demonstrate that they are competent to provide evidence that changes in behaviors of the patient are the result of the methods
applied by the psychologist (i.e., change is a function of the intervention).

(Research/Evaluation, Assessment)

4. Technological: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to employ and describe the intervention procedures precisely enough that those procedures could be followed completely by another psychologist without any significant variation from the procedures. (Intervention or Consultation)

5. Conceptually Systematic: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to describe the interventions used in a way that is consistent with basic behavioral principles, and describe how the interventions are derived from those principles. (Intervention or Consultation)

6. Effective: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to demonstrate that the interventions produced changes for the patient that were clinically or socially meaningful, particularly to any stakeholder invested in the patient’s functioning (including the patient). (Research/Evaluation)

7. Generality: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to change behaviors which remain changed after the intervention has ended, to produce changes in one setting that appear in different but meaningful settings, or
to affect change in related behaviors not originally the target of the interventions. (Assessment, Intervention, and/or Research/Evaluation)

Derived from Nezu, Martell, and Nezu (2013):

1. **Shaping and Prompting**: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent in the application of procedures designed to modify behaviors through the development of approximations of the target behavior by managing antecedents and operants; and through the introduction of prompts (antecedents) designed to increase the likelihood of a desired behavior to occur, as well as procedures designed to reduce or eliminate prompts while continuing to maintain desired behaviors. (Intervention)

2. **Contingency Management**: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent in the application of procedures that create systematic delivery of operants based on the emission of a targeted behavior, which may include the delivery of both rewards or punishers contingent on that emission, demonstrating with reliable data the capacity to increase or decrease the targeted behavior through the delivery of the contingent operants. (Intervention)

3. **Punishment Procedures**: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent in the application of punishment procedures that favor removal of rewards to extinguish a behavior, and employ differential reinforcement procedures
whenever possible in order to punish a behavior through the
reinforcement of competing behaviors demonstrated to serve the same
function as the behaviors to be replaced. Further, Psychologists board
certified in Cognitive and Behavioral Psychology demonstrates
competency in the behavioral assessment skills and analytic decision
processes that weigh the ethics of the application of aversive punishment
procedures. (Intervention)

Derived from the BACB Task List Beyond Competencies already Required of
Examinee (see Behavior Analyst Certification Board, 2012):

1. Measurement: Psychologists board certified in Cognitive and Behavioral
Psychology demonstrates that they are competent in the methods of
measuring behavior, assessing the reliability of observation data, the
display of behavioral data in graphic forms, and interpretation of
behavioral data. (Assessment and Research/Evaluation)

2. Experimental Design: Psychologists board certified in Cognitive and
Behavioral Psychology demonstrates that they are competent to design
behavioral experiments (in particular, single subject designs) that include
standard ABA strategies such as withdrawal designs and multiple-
baseline designs; and are competent in the consumption of ABA research.
(Research/Evaluation)

3. Basic Behavioral Change: Psychologists board certified in Cognitive and
Behavioral Psychology demonstrates that they are competent to employ
strategies of behavioral change, including management of rewards and
punishers, use and fading of prompts, use of modeling, use of positive and negative reinforcement, use of positive and negative punishment, use of extinction, designing of appropriate schedules of reinforcement and punishment, design of contingent and non-contingent rewards, and application of differential reward strategies. (Intervention)

4. Specific Behavioral Change Strategies: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to manage antecedents and motivational operants and to develop rule-governed behaviors. (Intervention)

5. Behavior Change Systems: Psychologists board certified in Cognitive and Behavioral Psychology demonstrates that they are competent to implement self-management strategies, token systems, behavioral applications to instruction, and functional skills development (e.g., functional communication). (Intervention, Consultation, Teaching).
References


### Stages of Education and Training

<table>
<thead>
<tr>
<th>Levels of Opportunity</th>
<th>Doctoral</th>
<th>Internship</th>
<th>Post-Doctoral</th>
<th>Post-Licensure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Area of Study</td>
<td>Within broad and general training in an COA accredited Clinical, Counseling, or School, 2-3 years of coursework covering attitudes, ethics, knowledge and skills in CBP, multiple supervised practica in CBP, dissertation or research project in CBP.</td>
<td>At least 75% of the APPIC member or COA accredited internship includes didactics in which the focus is on the attitudes, knowledge and skills of the specialty, and delivery of treatment or consultation employ research supported CBP treatments.</td>
<td>Preferably a COA accredited post-doctoral program with at least 80% of the program devoted to educational and training experiences based on attitudes, knowledge and skills in CBP, including participation in research and treatment using research supported treatment models within the specialty. The post-doc leads to a clear professional identity as a behavioral and cognitive psychologist. At least one of the post-doctoral supervisors is an ABPP Board Certified in the specialty. If the post-doctoral program focuses on applied behavior analysis, it shall include an ABPP Board Certified in CBP with competencies in applied behavior analysis, or an ABPP Board Certified in CBP AND a licensed psychologist holding a BCBA-D.</td>
<td>With at least two years of post-licensure experience that demonstrates the use of behavioral and cognitive, research supported treatments or consultations: An organized continuing education program, delivered by an APA or State Psychological Association approved provider that provides both coursework and consultative training in the attitudes, knowledge and skills in CBP, comprised of at least 60 hours of educational experience, and consultation at a level consistent with surveys of training programs setting the amount of coverage at this level.</td>
</tr>
</tbody>
</table>

1. Attitudes, knowledge and skills in cognitive and behavioral psychology are described in Klepac, et al., 2012.
2. Cross-content competencies are defined as those in which another specialty’s education and training employs attitudes, knowledge and skills in cognitive and behavioral psychology (see Klepac, et al., 2012) as a theoretical model, psychotherapeutic or consultative intervention methods, and/or research methodology. For example, a program offering education and training in the specialty of Clinical Child and Adolescent would have cross-content coverage if the primary model of case-conceptualization and psychological treatment was CBP. Thus a program might state that they have a specialty program with a major area of study in Clinical Child and Adolescent Psychology, with an Emphasis/Experience/Exposure to CBP.
<table>
<thead>
<tr>
<th>Emphasis</th>
<th>Within broad and general training in an COA accredited Clinical, Counseling, or School, at least the equivalent of 1 year of coursework covering attitudes, ethics, knowledge and skills in CBP, and at least one supervised practicum in CBP, and at least one independent study or research project in CBP.</th>
<th>At least 50% of the APPIC member or COA accredited internship includes didactics in which the focus is on the attitudes, knowledge and skills of the specialty, and delivery of treatment or consultation employ research supported CBP treatments. The coverage may include cross-content competencies.</th>
<th>Preferably a COA accredited post-doctoral program with 50-79% of the program providing cross-content coverage in another specialty employing the attitudes, knowledge and skills comprising CBP, including participation in research and treatment using research supported treatment models within the specialty. At least one of the post-doctoral supervisors is an ABPP Board Certified in the specialty. If the post-doctoral program focuses on applied behavior analysis, it shall include an ABPP Board Certified in CBP with competencies in applied behavior analysis, or an ABPP Board Certified in CBP AND a licensed psychologist holding a BCBA-D.</th>
<th>With at least two years of post-licensure experience that demonstrates the use of behavioral and cognitive research supported treatments or consultations: An organized continuing education program, delivered by an APA or State Psychological Association approved provider that provides both coursework and consultative training in the attitudes, knowledge and skills in CBP, comprised of at least 45 hours of educational experience, and consultation at a level consistent with surveys of training programs setting the amount of coverage at this level.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>Within broad and general training in an COA accredited Clinical, Counseling, or School, at least the equivalent of several courses covering attitudes, ethics, knowledge and skills in CBP, and at least one supervised practicum that includes use of behavioral and cognitive interventions.</td>
<td>At least 30% of the APPIC member or COA accredited internship includes didactics in which the focus is on the attitudes, knowledge and skills of the specialty, and delivery of treatment or consultation employ research supported CBP treatments. The coverage may include cross-content competencies.</td>
<td>Preferably a COA accredited post-doctoral program with at least 21-49% of the program providing cross-content coverage in another specialty employing the attitudes, knowledge and skills comprising CBP, including research or treatment activities using research supported treatment models within cognitive and behavioral psychology. At least one of the post-doctoral supervisors is an ABPP Board Certified in the specialty. If the post-doctoral program focuses on applied behavior analysis, it shall include an ABPP Board Certified in CBP with competencies in applied behavior analysis.</td>
<td>With at least two years of post-licensure experience that demonstrates the use of behavioral and cognitive research supported treatments or consultations: Continuing education courses, delivered by an APA or State Psychological Association approved provider that provides both coursework and consultative training in the attitudes, knowledge and skills in CBP, comprised of at least 15 hours of educational experience, and live demonstrations or role-plays utilizing clearly-defined CBP interventions or consultations.</td>
</tr>
<tr>
<td>Exposure</td>
<td>Within broad and general training in an COA accredited Clinical, Counseling, or School, <strong>at least the equivalent of two courses covering attitudes, ethics, knowledge and skills in CBP.</strong></td>
<td>At least 20% of the APPIC member or COA accredited internship includes didactics in which the focus is on attitudes, knowledge and skills of the specialty, and delivery of treatment or consultation employing research supported CBP treatments. The coverage may include cross-content competencies.</td>
<td>Preferably a COA accredited post-doctoral program with at least 20% of the program providing attitudes, knowledge and skills comprising CBP, including research or treatment activities using research supported treatment models within cognitive and behavioral psychology.</td>
<td>An organized continuing education program, delivered by an APA or State Psychological Association approved provider that provides both coursework and consultative training in the attitudes, knowledge and skills in CBP, comprised of at least 6 hours of educational experience.</td>
</tr>
</tbody>
</table>