UPDATE ON COMPETENCY DEVELOPMENT AND THE TAXONOMY IN CLINICAL NEUROPSYCHOLOGY

CURRENT ISSUES IN POSTDOCTORAL TRAINING

JUNE 9, 2016
Taxonomy
- A framework of common terms to describe training experiences based on their intensity.
- Provides consistency in how training experiences are described
- Benefits students/trainees, programs, organizations, and the public
- Facilitates “truth in advertising”

Competencies for Entry-level Practice
- Delineate the knowledge, skills, and abilities of clinical neuropsychologists at the end of formal training
- Detailed and expressed in narrative form (e.g., “able to gather information key to addressing the referral question, including interview(s), targeted behavioral observations, and review of records”)

Similar, in that both...
- ...are relevant to education and training
- ...differ across specialties
- ...call for broad consensus within a specialty
OUR CONSENSUS VEHICLE:
CLINICAL NEUROPSYCHOLOGY SYNARCHY (CNS)

- Clinical neuropsychology’s specialty council
- Representatives from major organizations:
  - American Academy of Clinical Neuropsychology (AACN)
  - American Board of Clinical Neuropsychology (ABCN)
  - American Board of Professional Neuropsychology (ABN)
  - Association for Doctoral Education in Clinical Neuropsychology (ADECN)
  - Association for Internship Training in Clinical Neuropsychology (AITCN)
  - Association of Postdoctoral Programs in Clinical Neuropsychology (APPCN)
  - National Academy of Neuropsychology (NAN)
  - Society for Clinical Neuropsychology (SCN; APA Division 40)
  - International Neuropsychological Society (INS)

- CNS meets at the INS North American Annual Meeting, with conference calls or emails as needed.
- CNS represents neuropsychology to the Council of Specialties in Professional Psychology (COSPP).
2005: APA task force identified need for common terminology to describe training experiences

Taxonomy framework
- Developed by “CRSPPP,” the APA commission that formally recognizes psychological specialties
- Approved as APA policy in 2012

For training programs, four levels of intensity are defined:
- Major Area of Study (most intensive level)
- Emphasis
- Experience
- Exposure (least intensive level)

Each specialty to define the terms for their practice area
- e.g., What does a “Major Area of Study” in clinical neuropsychology mean at the doctoral, internship, and postdoctoral training levels?

Taxonomy specifies how training experiences are described – not what is required

Describes training programs – not individuals

From 2013-2014, the CNS developed neuropsychology’s taxonomy

Input from all CNS organizations, with drafts generated by a Task Force composed of leaders of training groups:
  - ADECN
  - AITCN
  - APPCN
  - SCN Education Advisory Committee (EAC)

Most recent version was reviewed and approved at the CNS meeting in February 2015

Available on the COSPPP website (link below)

See http://cospp.org/guidelines
How is *intensity* defined?

- **Doctoral:** Number of neuropsychology courses, number and length of neuropsychology practica
  - All four descriptors are defined
- **Internship:** Percentage of time spent in neuropsychology
  - All four descriptors are defined
- **Postdoctoral:**
  - Only “Major Area of Study” is defined – other levels not appropriate
  - Requires two years full-time or equivalent of training in CN

**Taxonomy clarifies what is meant by a neuropsychology...**

- **“Course”:** Must address areas outlined in the Houston Conference Guidelines, Section VI.3 and Section VI.4
- **“Practicum”:** One academic year, at least 8 hours/week, at least 50% clinical contact.

See [http://cospp.org/guidelines](http://cospp.org/guidelines)
# TAXONOMY DETAIL FOR NEUROPSYCHOLOGY

<table>
<thead>
<tr>
<th>Major Area of Study</th>
<th>Doctoral</th>
<th>Internship</th>
<th>Postdoctoral</th>
<th>Post-licensure</th>
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<tbody>
<tr>
<td><strong>Major Area of Study</strong></td>
<td>Minimum of 1) Three neuropsychology courses, 2) two clinical neuropsychology practica, 3) additional coursework, practica, or didactics in clinical neuropsychology, AND 4) dissertation or research project in neuropsychology</td>
<td>1) At least 50% of training time in clinical neuropsychology AND 2) didactic experiences consistent with Houston Conference guidelines for knowledge and skill</td>
<td>Two-years full time (or the equivalent) of formal training in clinical neuropsychology, with relevant didactic, clinical, and research activities (including assessment and intervention that incorporate neuropsychological theories, perspectives, or methods and exposure to related healthcare disciplines)</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Emphasis</strong></td>
<td>1) Two neuropsychology courses AND 2) two clinical neuropsychology practica</td>
<td>&gt;30% and &lt;50% of experience in clinical neuropsychology supervised by a clinical neuropsychologist</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td>1) One or two neuropsychology course(s) AND 2) one clinical neuropsychology practicum</td>
<td>&gt;10% and &lt;30% of supervised experience in clinical neuropsychology</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td><strong>Exposure</strong></td>
<td>1) One neuropsychology course OR 2) one clinical neuropsychology practicum</td>
<td>5% - 10% of supervised experience in clinical neuropsychology and/or didactic training</td>
<td>N/A</td>
<td>Any hours of CE in clinical neuropsychology</td>
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Professor Joe: “Is my doctoral program’s “concentration” in clinical neuropsychology an “emphasis” or a “major area of study” in neuropsychology?”

The program has:
- Required neuropsychology dissertation
- Two courses devoted to clinical neuropsychology
- One 9-month neuropsychology practicum

It is an “Experience” in neuropsychology.
- Does not meet the “two practicum” requirement for a Major Area of Study or Emphasis

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**TAXONOMY EXAMPLE: DOCTORAL PROGRAM**

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Training Director Jim: “My internship program offers at least 30% time in neuropsychology”
- It is an “Emphasis” in neuropsychology.

Doctoral and internship programs:
- Must meet the broad and general requirements for general clinical practice (i.e., accreditation)
- No specific intensity in neuropsychology is required

If a postdoc program is consistent with Houston Conference Guidelines (HCG), it must be a Major Area of Study

The taxonomy does not change the flexibility of students or programs
ENTRY-LEVEL COMPETENCIES IN CLINICAL NEUROPSYCHOLOGY
Increasing emphasis on practice competencies:
- Medicine: Epstein & Hundert, 2002; Williams et al., 2010
- Psychology: Kaslow, 2004; Roberts, et al., 2005; Rodolfa, et al., 2005

Most developments in the past 15 years

What is competence?
- Focuses on outcomes that measure actual performance, with assessment of competency-defined trainee outcomes (Nelson, 2007).
- Shift from a focus on curriculum that meets learning objectives during specified durations of training.
- Typically measured in the context of professional activities under supervision.
- Both general and specific aspects of competence.

Competencies are distinctive elements necessary for competence; they correlate with performance and can be evaluated against agreed upon standards (Kaslow, 2004)
- Basis for defining and measuring trainee learning outcomes (Fouad et al., 2009)
1. Develop overall model of education and training
   - All specialties should have E&T Guidelines ([http://cospp.org/guidelines](http://cospp.org/guidelines))
   - e.g., Neuropsychology specialization requires a two-year postdoc
   - e.g., Geropsychology can involve a postdoctoral residency, but depending on earlier training it is not required (Knight et al., 2009)

2. Specify competencies for entry-level practice

3. Apply benchmarks to competencies
   - Beyond the current scope of this talk or the CNS effort
   - Define the performance that is expected at a given training level.
   - Use behavioral anchors
   - Defined in terms of readiness for...
     - ...practicum
     - ...internship
     - ...postdoc (if required)
     - ...entry level practice
COMPETENCY DEVELOPMENT IN OTHER PRACTICE AREAS: RECENT HIGHLIGHTS

- **Clinical Health Psychology**
  - Summit held in 2007 during which 20 nominees developed competencies (France, et al., 2008)

- **Rehabilitation Psychology**
  - Baltimore 2011 consensus conference – 46 attendees
    - Postdoctoral training model (Stiers et al., 2012)
    - Competencies developed (Stiers et al., 2015)

- **Professional Geropsychology**
  - Pike’s Peal model (Knight et al., 2009)
  - Competencies developed (Karen et al., 2010; Molinari, 2012)

- **Psychology Practice in Primary Care: Competencies developed** (McDaniel et al., 2014)

- **Health Service Psychology (HSPEC, 2013): Blueprint and competencies**
WHERE IS CLINICAL NEUROPSYCHOLOGY?

- Houston Conference Guidelines (HCG; Hannay, et al., 1998)
  - Overarching guidelines for education and training
  - Survey on HCG (Sweet et al., 2012)
    - HCG widely adopted by training programs
    - HCG-adherent training: Endorsed being better prepared than did those whose training was not adherent to HC guidelines
  - Make reference to “competency-based” training
    - Paints with a broad brush
    - Competencies lack specificity
    - No distinction made between general and neuropsychology-specific competencies

- Our overall E&T guidelines are sound and relevant
- HCG provide the skeleton...
  - Entry-level competencies would put the flesh on it
COMPETENCY DEVELOPMENT IN CLINICAL NEUROPSYCHOLOGY

Two publications:

Application of a Competency Model to Clinical Neuropsychology

Celiane Rey-Casserly
Children’s Hospital, Boston, Massachusetts and Harvard Medical School

Brad L. Roper
Memphis Veterans Affairs Medical Center, Memphis, Tennessee
and University of Tennessee Health Science Center

Russell M. Bauer
University of Florida

First attempt to apply a modern competency framework to HCG
Guidelines for practicum training that include relevant competencies and benchmarks of “Readiness for practicum” and “readiness for internship”
Initial developments have been made, but need broad consensus on entry-level competencies

Serve as the basis for our petition for continued recognition as a specialty area by APA (due at the end of 2016)

Provide resource for training programs, from which common materials can be developed

Compatible with a “portfolio” concept: defines the end-point

Enhance the process of specialty credentialing of clinical neuropsychologists

Identify the unique knowledge and skills of clinical neuropsychologists that will enhance broad advocacy efforts in a changing healthcare environment
Fall 2014: Task Force within the CNS: developed proposal for inter-organizational effort to develop entry-level competencies
- Used Rey-Casserly et al. (2012) and changes made by AACN practicum guidelines workgroup (Nelson et al., 2016)
- Proposal distributed early January 2014 to CNS member organizations

February 2015 CNS meeting: Decision made to undertake

Feb 2015 – Feb 2016: All CNS-member organizations review and provide feedback on proposal

Feedback collated and distributed to organizations (65 pages)

February 2016 CNS meeting:
- Discussed at length, with timeline determined
- Larger workgroup formed to make revisions

Early May 2016: Organizations provided with detailed responses regarding changes made as a result.
  - Request to limit feedback to comments from 2015
Proposal consists of a Preamble followed by Competency Tables.

Draws on competency development elsewhere in psychology and in other fields.

Preamble states that:
- Competencies complement and do not alter HCG.
- Describe expected outcomes that result from HCG-inspired education and training.
- Training occurs at all levels, all of which contribute to competency development, and is a shared responsibility of trainees and programs.
- Competencies intended to be aspirational in enumerating entry-level knowledge and skills.
- Meant for the entry level: Individuals will not employ or demonstrate all competencies equally over the course of their careers.

Tables: Competencies are described.
- Declarative statements regarding skills and abilities.
CNS ENTRY-LEVEL COMPETENCIES: FOUNDATIONAL

- **Foundational Competencies (Eight areas of competencies that apply across functional domains)**
  - **Scientific Knowledge and Methods** (3) Example: “...demonstrates and applies knowledge of scientific and scholarly developments in clinical neuropsychology.”
  - **Evidence Based Practice** (9) Example “...understands age-related changes in brain functioning and behavior across the lifespan.”
  - **Individual and Cultural Diversity** (2) Example “...integrates knowledge of diversity issues in neuropsychological assessment, research, treatment, and consultation (e.g. health disparities, language differences, educational level, cultural context, literacy, individual differences).”
  - **Ethical, Legal Standards and Policy** (2)
  - **Professional Identity** (2)
  - **Reflective Practice/Self-Assessment/Self-Care** (1)
  - **Relationships** (2)
  - **Interdisciplinary Systems** (4)
CNS ENTRY-LEVEL COMPETENCIES: FUNCTIONAL

### Functional Competencies (7 Areas)

- **Assessment (19) Examples:**
  - Knowledge of theories and methods of measurement and psychometrics relevant to cognitive abilities, social and emotional functioning, and brain-behavior relationships, including test development, reliability, reliable change, and validity approaches (e.g., construct, content, criterion, ecological).
  - Ability to appropriately select tests, measures, and other information sources consistent with best evidence and specific context of assessment, including assessment of performance and symptom validity, if relevant.

- **Intervention (12) Example:**
  - Ability to develop and implement treatment plans that address neuropsychological deficits while accounting for patient preferences, individual differences, and social-cultural context.

- **Consultation (10) Example:**
  - Knowledge of professional roles and expectations of a consulting clinical neuropsychologist specific to each setting.
Functional Competencies (7 Areas), Cont’d.

- **Research/Evaluation** (9) Example:
  - Ability to demonstrate skills in conceptualizing, implementing, and interpreting research design and statistical analysis.

- **Teaching/Supervision** (9) Examples:
  - Knowledge of developmental stages in training that may impact the acquisition of clinical neuropsychology knowledge and skills.
  - Ability to provide effective teaching activities, presenting materials in an organized manner that is appropriate to the needs of the audience.

- **Management/Administration** (6) Example:
  - Ability to function effectively within administrative systems, educating others about role of neuropsychology and supporting structures with the goal of improving access to needed services.

- **Advocacy** (4) Example:
  - Ability to apply scientific knowledge and skills in neuropsychology to advocate for needs of individuals/groups across systems and to advocate for equity and access to quality care.
Competencies are aspirational and part of an integrated approach to enumerating entry-level knowledge/skills in clinical neuropsychology.

Aimed at current practice...
- The large majority of competencies express what training programs are already doing.

...with an eye toward both current and future needs:
- Are they clinical silos in which we get paid to “diagnose and adios”? Or...
  - Integrated care settings in which we need to...
    - Work in diverse teams
    - Actively promote our practice
    - Design and evaluate our clinical services
    - Demonstrate clinical outcomes

Creating the neuropsychologists of the future is a shared responsibility across students/trainees and training programs.
QUESTIONS?