Application of the Competency Cube Model to Clinical Child Psychology

Yo Jackson
University of Kansas

Yelena P. Wu and Brandon S. Aylward
Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio

Michael C. Roberts
University of Kansas

Within the field of clinical psychology, assessment of practitioner competency or competency achieved through training has received increasing emphasis over the last decade. Using the competency cube as a model, the current article articulates how competencies in clinical child psychology can be defined and applied to the clinical child psychology specialty area. Specifically, both foundational and functional competencies related to the practice of clinical child psychology are discussed. It is hoped that by detailing the application of the competency cube model to the practice of clinical child psychology, psychology professionals and the public at large may gain a better understanding of this specialty field and identify areas for growth and professional development.

Keywords: competency, clinical child psychology, practice, training

Applications of psychological research and practice focused on children and adolescents had an early start in North American psychology. In fact, the foundations of clinical psychology in

Yo Jackson received her PhD in clinical psychology from The University of Alabama. She is an Associate Professor and the Associate Director of the KU Child and Family Services Clinic at the University of Kansas. Her areas of research and practice include the development and mechanisms of resilience for youth exposed to trauma, child maltreatment, systems of care for mental health delivery, and developmental psychopathology.

Yelena P. Wu received her PhD from the Clinical Child Psychology Program at the University of Kansas. She is currently a postdoctoral fellow at Cincinnati Children's Hospital Medical Center. Her areas of research include chronic illness treatment adherence and self-management among children and their families, professional issues, and translational research in the area of pediatric treatment adherence.

Brandon S. Aylward received his PhD from the Clinical Child Psychology Program at the University of Kansas. He is currently a T32 postdoctoral fellow in Behavioral Medicine and Clinical Psychology at Cincinnati Children's Hospital Medical Center and is also completing an additional fellowship in the Quality Scholars Program in Healthcare Transformation. His areas of research include identifying predictors and correlates of children's psychosocial, developmental, and physical functioning outcomes in pediatric populations and using advanced statistical methodology and innovative technology to better understand health behaviors and outcomes.

Michael C. Roberts received his PhD in clinical psychology from Purdue University. He is a professor in the Clinical Child Psychology Program at the University of Kansas. His areas of research and practice include professional issues, therapeutic outcomes and program evaluation, mental health and service delivery, and clinical child/pediatric psychology.

Correspondence concerning this article should be addressed to Yo Jackson, University of Kansas, Clinical Child Psychology Program, 1000 Sunnyside Avenue, Room 2013, Lawrence, KS 66045. E-mail: yjackson@ku.edu

general derive from the first psychological clinic for children. In 1896, Lightner Witmer consulted with parents, caregivers, and medical personnel on issues related to children's psychological and educational issues (Routh, 1994). In an early book about the specialty entitled *The Practice of Clinical Child Psychology*, Alan Ross (1959) indicated that the field needed (a) formal organizations, (b) scientific journals, (c) professional meetings and conferences, and (d) training and education standards for clinical child psychology specialists. Finch, Lochman, Nelson, and Roberts (2012) provide a timeline of historical developments for clinical child psychology indicating its substantial development through the years, to a point where it is a recognized specialty with strong evidence of each of the elements outlined by Ross.

Recently, the field of professional psychology has turned its attention to the development and articulation of what it means to be a competent professional psychologist. In the United States, the effort to organize agreement about what competency is in psychology and how it should be operationalized is in development and signs of growth were clearly evident in the convening of the 2002 Competencies Conference (for summary, see Kaslow et al., 2004). One result of the conference was the initial development of a conceptual model known as the Competency Cube (Rodolfa et al., 2005). The Cube model provides a competency conceptual framework for the professional psychology field in three dimensions: (a) foundations of practice representing knowledge, values, and attitudes, (b) functions of practice representing the work or practice of psychologists, and (c) training and professional development expected of all professional members of the field. Later iterations of competencies have outlined training expectations, but specific applications to competent practice have been less frequent (Hatcher & Lassiter, 2007; see also Competencies Initiative in Professional Psychology: http://www.apa.org/ed/graduate/competency.aspx). By definition, foundational competencies specified in the Cube model are expected to apply to all specialties of recognized psychology and allow for the addition of values that may be unique to a particular specialty. Moreover, Rodolfa et al. (2005) suggested that the

functional competencies, although likely representative of most of the work of a professional psychologist, could also be adapted for specialties in professional psychology. The purpose of this article is to apply the foundational and functional competencies outlined in the Cube to the practice of clinical child and adolescent psychology. The present article is the first to provide detailed information and tables describing each area of the Cube and specifics on how each is demonstrated by a competent clinical child psychologist. It is hoped that by detailing the application of the Cube to clinical child psychology, psychology professionals and the public at large may gain a better understanding of the field and identify areas for growth and professional development.

We use the term *competency* in this article to describe a clinical child psychologist (CCP) who is qualified and capable in understanding and performing clinical work with youth and families in an effective manner. Similar to the position of Rodolfa et al. (2005), this definition includes the notion that competence is behavioral and that knowledge of clinical child psychology and clinical skills are not sufficient, but require public verification of what is achieved by the psychologist. According to Rodolfa et al., *foundational competencies* (knowledge, values, and attitudes) include reflection and self assessment, scientific knowledge and methods, relationships, ethical and legal issues, cultural diversity and interdisciplinary systems. *Functional competencies*, in contrast, are what psychologists actually do and include assessment and diagnosis, intervention, consultation, research, supervision and teaching, and administration.

A primary distinction for CCP is the appreciation of the child's behavior and mental health in the larger context of developmental expectations and caregiver behavior (i.e., family, schools). What follows is an explanation and expansion of the foundational and functional competencies as outlined by Rodolfa et al., as they apply to entry-level professionals in the field of clinical child psychology along with tables detailing specific knowledge-based and application-based competencies (similar to that provided by France et al. (2008) for the specialty of Clinical Health Psychology). Broad clinical competency issues that are not specific to the practice of clinical child psychology will not be covered in depth within each of the foundational and functional competency areas. Examples of these issues include understanding the psychologist's values, attitudes, reactions to particular clients or interactions with other providers and systems, and culture (which broadly defined can also include multiple diversity statuses such as age, gender identity, socioeconomic status), and the impact of these factors on the psychologist's work.

Assessment and Diagnosis Competencies

The ability to measure and diagnose mental health problems in youth is a key practice of clinical child psychologists. Although shared with other clinical specialties, the role of the CCP's assessment competency has at its core an appreciation for the developmental stage of the child and the function of the child's behavior in the context of the family and other important and common settings (e.g., school). Specific assessment knowledge-based and application-based competencies are reflected in Table 1.

Table 1

Assessment Competencies in Clinical Child Psychology

Knowledge-based	A. Child and adolescent development
	B. The importance and relevance of multiple reporters on child functioning
	C. Systems of care and the utility of test results for placement in school and determination of service needs and use
	D. Social and environmental influences of child behavior and development
	E. Psychometrics and the appropriate use of test materials
Application-based	A. Makes appropriate use of rating scales, interviewing techniques, and behavioral observations according to the referral question, the child's developmental level, and the cultural values of the child and family
	B. Evaluates and selects tests based on empirical evidence for use with a specific referral issue, understands ethical implications of test results, diagnoses, and conclusions, and maintains confidentiality of findings
	C. Assesses risk factors associated with the development of child psychopathology, incorporates developmental history (i.e., prenatal, early child rearing, physical health) into assessment plan
	D. Determines the effects of treatment or other supportive services on child mental health, tracks changes in youth functioning over time, and identifies the developmental impact of psychological health
	E. Writes coherent and focused reports based on test data, provides meaningful and useful recommendations for parents, teachers, and other care providers, and effectively communicates testing results to stakeholders

Reflective Practice/Self-Assessment

CCPs administer and interpret measurement tools on which they have been trained, and evidence the ability to expertly report results. The CCP continually reviews available measurement tools for youth and their caregivers, and has current understanding of the use of measurement tools administered to youth. CCPs evaluate their rationale and the need for testing a given client because the implications of results and diagnoses have the potential for lifelong ramifications on the youth's ability to obtain services and access resources (e.g., education placement; psychotherapy).

Scientific Knowledge and Methods

The CCP understands the importance of emotional, social, behavioral, cognitive, and physical development in assessment. Furthermore, the CCP understands the scientific literature and the biological bases of behavior, and applies a social context for a youth's behavior, appreciating that the economic and cultural environment may play a significant role in the mental health of youth and their families. CCPs administer empirically supported test materials for the referral question based on the age and developmental level of the youth. Competency is also evidenced by the CCP's demonstration of the ability to evaluate and use research findings and use emerging technologies to assist in mental health assessment. Clinical practice should involve scientifically

Application of the Competency Cube Model to Clinical Child Psychology

Yo Jackson
University of Kansas

Yelena P. Wu and Brandon S. Aylward
Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio

Michael C. Roberts
University of Kansas

Within the field of clinical psychology, assessment of practitioner competency or competency achieved through training has received increasing emphasis over the last decade. Using the competency cube as a model, the current article articulates how competencies in clinical child psychology can be defined and applied to the clinical child psychology specialty area. Specifically, both foundational and functional competencies related to the practice of clinical child psychology are discussed. It is hoped that by detailing the application of the competency cube model to the practice of clinical child psychology, psychology professionals and the public at large may gain a better understanding of this specialty field and identify areas for growth and professional development.

Keywords: competency, clinical child psychology, practice, training

Applications of psychological research and practice focused on children and adolescents had an early start in North American psychology. In fact, the foundations of clinical psychology in

YO JACKSON received her PhD in clinical psychology from The University of Alabama. She is an Associate Professor and the Associate Director of the KU Child and Family Services Clinic at the University of Kansas. Her areas of research and practice include the development and mechanisms of resilience for youth exposed to trauma, child maltreatment, systems of care for mental health delivery, and developmental psychopathology.
YELENA P. WU received her PhD from the Clinical Child Psychology Program at the University of Kansas. She is currently a postdoctoral fellow at Cincinnati Children's Hospital Medical Center. Her areas of research include chronic illness treatment adherence and self-management among children and their families, professional issues, and translational research in the area of pediatric treatment adherence.
BRANDON S. AYLWARD received his PhD from the Clinical Child Psychology Program at the University of Kansas. He is currently a T32 postdoctoral fellow in Behavioral Medicine and Clinical Psychology at Cincinnati Children's Hospital Medical Center and is also completing an additional fellowship in the Quality Scholars Program in Healthcare Transformation. His areas of research include identifying predictors and correlates of children's psychosocial, developmental, and physical functioning outcomes in pediatric populations and using advanced statistical methodology and innovative technology to better understand health behaviors and outcomes.
MICHAEL C. ROBERTS received his PhD in clinical psychology from Purdue University. He is a professor in the Clinical Child Psychology Program at the University of Kansas. His areas of research and practice include professional issues, therapeutic outcomes and program evaluation, mental health and service delivery, and clinical child/pediatric psychology.
CORRESPONDENCE CONCERNING THIS ARTICLE should be addressed to Yo Jackson, University of Kansas, Clinical Child Psychology Program, 1000 Sunnyside Avenue, Room 2013, Lawrence, KS 66045. E-mail: yjackson@ku.edu

general derive from the first psychological clinic for children. In 1896, Lightner Witmer consulted with parents, caregivers, and medical personnel on issues related to children's psychological and educational issues (Routh, 1994). In an early book about the specialty entitled *The Practice of Clinical Child Psychology*, Alan Ross (1959) indicated that the field needed (a) formal organizations, (b) scientific journals, (c) professional meetings and conferences, and (d) training and education standards for clinical child psychology specialists. Finch, Lochman, Nelson, and Roberts (2012) provide a timeline of historical developments for clinical child psychology indicating its substantial development through the years, to a point where it is a recognized specialty with strong evidence of each of the elements outlined by Ross.

Recently, the field of professional psychology has turned its attention to the development and articulation of what it means to be a competent professional psychologist. In the United States, the effort to organize agreement about what competency is in psychology and how it should be operationalized is in development and signs of growth were clearly evident in the convening of the 2002 Competencies Conference (for summary, see Kaslow et al., 2004). One result of the conference was the initial development of a conceptual model known as the Competency Cube (Rodolfa et al., 2005). The Cube model provides a competency conceptual framework for the professional psychology field in three dimensions: (a) foundations of practice representing knowledge, values, and attitudes, (b) functions of practice representing the work or practice of psychologists, and (c) training and professional development expected of all professional members of the field. Later iterations of competencies have outlined training expectations, but specific applications to competent practice have been less frequent (Hatcher & Lassiter, 2007; see also Competencies Initiative in Professional Psychology: http://www.apa.org/ed/graduate/competency.aspx). By definition, foundational competencies specified in the Cube model are expected to apply to all specialties of recognized psychology and allow for the addition of values that may be unique to a particular specialty. Moreover, Rodolfa et al. (2005) suggested that the

functional competencies, although likely representative of most of the work of a professional psychologist, could also be adapted for specialties in professional psychology. The purpose of this article is to apply the foundational and functional competencies outlined in the Cube to the practice of clinical child and adolescent psychology. The present article is the first to provide detailed information and tables describing each area of the Cube and specifics on how each is demonstrated by a competent clinical child psychologist. It is hoped that by detailing the application of the Cube to clinical child psychology, psychology professionals and the public at large may gain a better understanding of the field and identify areas for growth and professional development.

We use the term *competency* in this article to describe a clinical child psychologist (CCP) who is qualified and capable in understanding and performing clinical work with youth and families in an effective manner. Similar to the position of Rodolfa et al. (2005), this definition includes the notion that competence is behavioral and that knowledge of clinical child psychology and clinical skills are not sufficient, but require public verification of what is achieved by the psychologist. According to Rodolfa et al., *foundational competencies* (knowledge, values, and attitudes) include reflection and self assessment, scientific knowledge and methods, relationships, ethical and legal issues, cultural diversity and interdisciplinary systems. *Functional competencies*, in contrast, are what psychologists actually do and include assessment and diagnosis, intervention, consultation, research, supervision and teaching, and administration.

A primary distinction for CCP is the appreciation of the child's behavior and mental health in the larger context of developmental expectations and caregiver behavior (i.e., family, schools). What follows is an explanation and expansion of the foundational and functional competencies as outlined by Rodolfa et al., as they apply to entry-level professionals in the field of clinical child psychology along with tables detailing specific knowledge-based and application-based competencies (similar to that provided by France et al. (2008) for the specialty of Clinical Health Psychology). Broad clinical competency issues that are not specific to the practice of clinical child psychology will not be covered in depth within each of the foundational and functional competency areas. Examples of these issues include understanding the psychologist's values, attitudes, reactions to particular clients or interactions with other providers and systems, and culture (which broadly defined can also include multiple diversity statuses such as age, gender identity, socioeconomic status), and the impact of these factors on the psychologist's work.

Assessment and Diagnosis Competencies

The ability to measure and diagnose mental health problems in youth is a key practice of clinical child psychologists. Although shared with other clinical specialties, the role of the CCP's assessment competency has at its core an appreciation for the developmental stage of the child and the function of the child's behavior in the context of the family and other important and common settings (e.g., school). Specific assessment knowledge-based and application-based competencies are reflected in Table 1.

Table 1

Assessment Competencies in Clinical Child Psychology

Knowledge-based	A. Child and adolescent development B. The importance and relevance of multiple reporters on child functioning C. Systems of care and the utility of test results for placement in school and determination of service needs and use D. Social and environmental influences of child behavior and development E. Psychometrics and the appropriate use of test materials
Application-based	A. Makes appropriate use of rating scales, interviewing techniques, and behavioral observations according to the referral question, the child's developmental level, and the cultural values of the child and family B. Evaluates and selects tests based on empirical evidence for use with a specific referral issue, understands ethical implications of test results, diagnoses, and conclusions, and maintains confidentiality of findings C. Assesses risk factors associated with the development of child psychopathology, incorporates developmental history (i.e., prenatal, early child rearing, physical health) into assessment plan D. Determines the effects of treatment or other supportive services on child mental health, tracks changes in youth functioning over time, and identifies the developmental impact of psychological health E. Writes coherent and focused reports based on test data, provides meaningful and useful recommendations for parents, teachers, and other care providers, and effectively communicates testing results to stakeholders

Reflective Practice/Self-Assessment

CCPs administer and interpret measurement tools on which they have been trained, and evidence the ability to expertly report results. The CCP continually reviews available measurement tools for youth and their caregivers, and has current understanding of the use of measurement tools administered to youth. CCPs evaluate their rationale and the need for testing a given client because the implications of results and diagnoses have the potential for lifelong ramifications on the youth's ability to obtain services and access resources (e.g., education placement; psychotherapy).

Scientific Knowledge and Methods

The CCP understands the importance of emotional, social, behavioral, cognitive, and physical development in assessment. Furthermore, the CCP understands the scientific literature and the biological bases of behavior, and applies a social context for a youth's behavior, appreciating that the economic and cultural environment may play a significant role in the mental health of youth and their families. CCPs administer empirically supported test materials for the referral question based on the age and developmental level of the youth. Competency is also evidenced by the CCP's demonstration of the ability to evaluate and use research findings and use emerging technologies to assist in mental health assessment. Clinical practice should involve scientifically

based hypothesis generation and data collection to test those hypotheses, so that even in the most clinical of activities, a science-based methodology is followed.

Relationships

The provision of psychological services occurs within the context of the professional relationship. Relationships with youth, their caregivers, and members of the community and agencies that serve youth are critical to successful mental health intervention. Because the results of testing can be influenced by rapport with the examiner, CCPs are equipped to develop a positive working relationship with youth to ensure that the results of the assessment represent the most accurate data on the youth's functioning. For example, CCPs understand a child's developmental status and know how to build positive working relationships with preschool-age children as well as adolescents. Moreover, competent CCPs must have an understanding of how youth at different ages behave socially so as to put the youth's performance during testing in the proper context. Competent CCPs understand that assessment relationships are not restricted to the identified client only and that relationships with other professionals are often key to accessing important data in the assessment process.

Ethical and Legal Standards/Policy Issues

Psychologists are bound to the ethical guidelines published by APA (APA, 2002, 2010) and by the legal standards provided by jurisdictional licensure boards and relevant legislation such as the Family Educational Rights and Privacy Act. As it is with intervention, obtaining consent for assessment and maintaining confidentiality of the test materials and information is paramount to the behavior of a competent CCP. The ethical practice of assessment means that CCPs adhere to these rules and use assessment tools for the intent for which they were created, normed, and developed. CCPs demonstrate an understanding of the legal and ethical ramifications of the assessment measures used in addressing the mental health of youth.

Individual and Cultural Diversity

CCPs are aware of the ability of the assessment tools they use to capture the wide range of cultural influences on youth mental health. CCPs appreciate that measures used in assessment are valid for specific purposes and that interpretation may require caution when applied to clients whose cultural background varies from the original test normative sample. Moreover, CCPs are knowledgeable in cultural values that may impact testing and are sensitive to how to interact with others whose values may differ from those of the individual CCP or those of the field. For example, because testing behaviors can differ among youth from diverse cultural backgrounds due to the variety of ways that academic achievement is demonstrated, CCPs should take caution in how behaviors during testing and testing results are interpreted.

Interdisciplinary Systems

CCPs are not the only discipline to conduct psychological testing with youth. and so specialists are aware of the importance of collaboration with experts in other specialties. For example, CCPs may work with school psychologists in administering and interpreting test results and are able to work effectively with interdisciplinary teams in determining the best course of action to promote the mental health of youth.

Intervention Competencies

CCPs may implement interventions in a variety of settings (Jackson, Alberts, & Roberts, 2010). Both prior to and during intervention, CCPs obtain a thorough understanding of the nature of client's presenting problems (e.g., history of the problem, impact of the problem on the child's life and environment, current presentation of problems) and the multiple factors (e.g., biopsychosocial, family, cultural) impacting the referral concern. The CCP tailors the intervention to address the unique factors impacting the presenting problems and youth's developmental level. For example, depression treatment for a young, school-age child would encompass different therapeutic techniques from depression treatment for an adolescent. In addition, CCPs involve the client's caregivers in the intervention and ensure that the approach to resolving child mental illness is multifaceted and in the context of their environment (i.e., the role of parents and teachers, behavior in the school and home setting). Specific intervention knowledge-based and application-based competencies are reflected in Table 2.

Reflective Practice/Self-Assessment

The CCP is expected to competently deliver interventions that are evidence-based (Kazak et al., 2010), appropriate for the presenting problems, and tailored to the child's developmental level and the CCP's practice setting (e.g., medical clinic vs. outpatient therapy office). Practitioners should monitor the effectiveness and acceptability of their interventions through ongoing assessment of

Table 2
Intervention Competencies in Clinical Child Psychology

Knowledge-based	A. Evidence-based practice, interventions for youth across the age spectrum and the standards for evidence
	B. Impact of developmental level on intervention
	C. Impact of environment (i.e., school, family) on intervention with youth
	D. Understanding of ethical and legal issues regarding consent for treatment
Application-based	A. Integrates evidence-based practice and clinical expertise to meet the mental health needs of youth and families consistent with their cultural values
	B. Integrates social, cognitive, affective and biological bases of behavior in the development and implementation of treatment plans for youth
	C. Works with treatment teams or interdisciplinary teams in developing and implementing treatment
	D. Evaluates and adheres to evidence-based practice including the evaluation and adjustment of intervention techniques to meet the developmental needs of the child over time
	E. Maintains awareness and appropriate management of ethical issues
	F. Incorporates possible mediators and moderators that may impact treatment effectiveness

treatment outcomes (e.g., using reliable and valid instruments) and their relationship with clients (Stark, 2010). As new interventions are introduced to the field, CCPs obtain training and supervision in those identified as effective (based on empirical evidence) and implement treatment with flexibility within fidelity to the treatment guidelines. In addition, CCPs regularly assess their intervention abilities in the context of their areas of practice (i.e., self-assessment of competencies) and when changing their practice patterns and parameters to include different diagnoses, treatments, or settings (Jackson et al., 2010). CCPs should recognize the influence that their own beliefs, culture, experiences, personal factors, and attitudes may have on their selection and tailoring of interventions, approach, and relationship with clients and families.

Scientific Knowledge and Methods

CCPs engage in regular review of the empirical literature relevant to their areas of practice to ensure that they are implementing the most effective treatments available and that they can provide education (e.g., to families, schools) on the empirical evidence underlying the interventions provided. Sources of scientific knowledge of interventions and methods may include attendance at conferences and relevant workshops and reading literature in empirical journals. In the course of reviewing empirical evidence, CCPs critically evaluate the literature and consider whether the findings should impact their intervention delivery.

Relationships

CCPs develop and maintain effective working relationships with clients, their families, and the other organizations involved in the intervention (e.g., school). In particular, the CCP's relationship with a client's family, which may include extended family, is essential for effective interventions. An effective working relationship with a client's family promotes positive treatment outcomes, for example, by ensuring that key family members are engaged in the intervention process and implementation of treatment recommendations, by expanding the CCP's understanding of the family's perception of acceptability of the intervention so that it can be further tailored to meet the family's preferences, and by ultimately increasing the likelihood that treatment recommendations will be implemented at home. To ensure that the CCP builds and maintains effective relationships, it is helpful to assess progress over time (e.g., in treatment outcomes) and client/parent/organization satisfaction with the CCP's services. It is important to note, however, that effective working relationships or positive treatment outcomes may not always correlate with positive ratings of the CCP (e.g., via satisfaction ratings) (Lambert, Salzer, & Bickman, 1998).

Ethical and Legal Standards/Policy Issues

The CCP is expected to obtain proper consent for a client's treatment (Jackson et al., 2010), abide by reporting procedures, and complete accurate documentation (e.g., progress notes) according to ethical standards and jurisdictional laws. Where medication prescription privileges are present, the CCP should understand and follow laws relevant to this practice. Additionally, because of special considerations of child development that can be very different from practice with adults, the competent clinical child practitioner implements informed consent, child assent for treatment, and information sharing agreements; establishes conditions of confidentiality for minors in treatment; and is knowledgeable of policies and community practices about child, adolescent, and family services. Furthermore, because of special considerations, the CCP is knowledgeable of legal requirements and mandates including those specific to children and vulnerable populations (viz., HIPAA, child abuse reporting mandates, consent to treatment, court-ordered assessment/treatment of minors, the Individuals with Disabilities Education Act, child custody law and judgments, and the Family Educational Rights and Privacy Act). Particular care is undertaken by the CPP in light of special developmental status and vulnerabilities of children, including knowledge of psychopharmaceutical prescribing practices, and off-label prescribing that occurs due to lack of testing with children (see Brown et al., 2008).

Individual and Cultural Diversity

Prior to and during intervention implementation, the CCP should consider how features of diversity may affect the presenting problems and a client's/family's engagement in the intervention, and modify interventions as needed to ensure maximal intervention effectiveness. This issue may be particularly germane when children or families have different perspectives on the nature of the presenting problems. For example, a child may be referred for psychological treatment by the school due to concerns about the child's withdrawn behavior; however, within the context of the child's family, this behavior is viewed as normative and desirable. The CCP should consider how to present the referral concerns to the family, discuss potential treatment goals with both the school and family that supports each party's unique concerns and hopes for the child (e.g., expectations for learning, behavioral goals in the classroom, establishment of feedback loop between school and home), and tailor treatments, to the extent possible, to be acceptable to the child and family. In addition, CCPs understand how their own culture, clients' cultures, and the fit between the specialty practitioner and client's culture may affect intervention implementation and effectiveness. The CCP has knowledge of the empirical literature describing the extent to which interventions have been adapted or tested with diverse groups and uses this literature to inform the choice of intervention.

Interdisciplinary Systems

The CCP effectively engages with a variety of systems and professionals who also serve child clients and their families. These may include health care, education, and recreation systems, for example, and may involve other professionals such as social workers, nurses, teachers, lawyers, pediatricians, and psychiatrists. Collaboration and coordination of services are frequently necessary to increase the effectiveness of intervention. Through their interdisciplinary/interprofessional relationships, CCPs also demonstrate and provide education on the positive impact that psychological treatments have on the activities of other disciplines (e.g., the benefits of psychological treatment for adolescent clients involved in the juvenile justice system or for patients in a children's hospital). CCPs also refer clients to other professionals or facilitate these referrals if a presenting problem may be more effectively treated with alternative or additional services.

Consultation Competencies

CCPs may provide consultation to clients, families, allied professionals, organizations, and working teams (e.g., a medical team). These consultations may occur in any setting in which a CCP practices or functions as a professional psychologist (e.g., in a school district), or can occur in the context of informal and "curbside" consultations (e.g., via phone). For example, a pediatrician may consult with a CCP to inquire about the differences between normative behaviors (e.g., for young children, difficulties separating from caregivers) and behaviors that have reached a level necessitating referral or more intense intervention (e.g., difficulty with independent sleep at 15 years of age). In the course of consultations, the CCP uses his or her understanding of developmental issues and ability to work effectively with families to guide the recommendations provided. Specific consultation knowledge-based and application-based competencies are reflected in Table 3.

Reflective Practice/Self-Assessment

CCPs provide consultation on issues within their unique areas of expertise. When asked to provide consultation outside of one's areas of expertise, the CCP seeks supervision and/or referrals as needed. In the course of consultation, CCPs provide education to their consultees on the services and expertise which CCPs can

Table 3
Consultation Competencies in Clinical Child Psychology

Knowledge-based	A. Understanding of the role of other service providers to children (i.e., pediatricians, teachers) and the interplay between agencies serving children and understanding the literature as it relates to the role of consultants to child mental health care
	B. Awareness of the mission of systems of care, agencies and professionals present in settings that service children (i.e., hospitals, schools)
	C. Awareness of the role of culture in systems of care and in the child's life as methods are best identified for meeting the child's needs
	D. Understanding of other specialty fields as they apply to clinical child psychology (i.e., school psychology, developmental psychology)
Application-based	A. Understands the referral question and conceptualizes the needs of the child based on developmental level and environmental demands
	B. Appropriately discusses mental health findings to systems and nonpsychological professionals to meet the child's mental health needs
	C. Shares with relevant stakeholders, incorporates relevant research in forming consultation advice, identifies diverse methods and levels of analysis that are best suited to responding to the referral question, and communicates these findings effectively
	D. Ethically manages issues that may arise in consultation
	E. Applies and communicates about clinical intervention to meet the needs of non-clinical referral questions

provide and the value their services can have in achieving desired outcomes.

Scientific Knowledge and Methods

During consultation, CCPs are expected to use their developmentally based research training and skills (e.g., knowledge of research methodology, interpretation and critical examination of research findings, application of research findings to consultation). When working with professionals from other disciplines, CCPs gain understanding of the relevant research in those other fields (e.g., a CCP working as part of a medical team should understand how the medical field conceptualizes and treats the children's problems). This collaborative knowledge can inform the CCP's understanding of the perspectives of other disciplines and thus enable the CCP to better meet the needs of the consultee. For example, the CCP can tailor the content or presentation of the information provided to be more easily understood by the consultee.

Relationships

CCPs initiate and maintain effective consultation and collaborative relationships, which includes effectively negotiating the different roles a CCP may play as a consultant (e.g., as a leader or coleader of a team, as a team member reporting to a leader, etc.; Spirito et al., 2003). Ongoing assessment of these relationships should be conducted.

Ethical and Legal Standards/Policy Issues

CCPs understand and implement ethical and legal procedures relevant to consultation (e.g., procedures related to billing or reporting of abuse/neglect), the settings in which the consultation takes place (e.g., pediatrician's office, medical center, mental health center, or independent or group practice), and client populations involved (e.g., abused children, medically ill children; Spirito et al., 2003).

Individual and Cultural Diversity

The CCP takes into account how diversity-related issues may impact consultees and/or the client population involved, and the CCP tailors the consultation appropriately (e.g., a CCP may tailor the content or process of consultation to meet the needs of diverse professionals or different settings). For example, in the medical setting, it can be challenging to address issues that arise (e.g., nonadherence to medical regimens related to cultural values) when a child's family's culture is not consistent with the values or expectations of the Western medical culture (Fadiman, 1997). In these situations, the CCP's role may therefore include assessment of the cultural issues affecting the referral concern (both the family and medical provider's cultures), assisting the consultee (e.g., medical providers) with conceptualizing the factors affecting the issues at hand, and helping formulate a plan for how to address these differences in future interactions.

Interdisciplinary Systems

The CCP effectively gathers information on the multiple systems affecting the presenting problems of children and their fam-

ilies or referral question central to the consultation. The CCP engages the systems affecting the referral question and may continue to work interprofessionally with these systems in recommended interventions. For CCPs, some common systems include medical, school, and allied professional (e.g., social work, OT/PT, counselors) systems.

Research Competencies

Consistent with the scientist-practitioner approach to training in clinical child psychology, research methodology is a key component that should be integrated with theory and practice throughout all aspects of professional training (France et al., 2008; Roberts et al., 1998). Regardless of the role as a CCP (i.e., clinician, researcher, administrator, etc.), the professional should have an appreciation of scientifically derived knowledge, understand research methodology, and be able to effectively evaluate research findings. This empirical orientation transcends all aspects of training and professional activities, including in independent research activities as well as clinical assessment and treatment experiences (Spirito et al., 2003). Specific research knowledge-based and application-based competencies are reflected in Table 4.

Table 4
Research Competencies in Clinical Child Psychology

Knowledge-based	A. Understanding of the scientific method, research design, statistical techniques and staying current on research findings regarding the inclusion of youth in research
	B. Knowledge of ethical guidelines relevant to research with minors and families including the expectancy for research to contribute to the well-being of youth
	C. Knowledge of how research is conducted (i.e., including recruitment strategies across multiple settings for youth and families (hospitals, schools)
	D. Understanding of how age, culture, family structure, reporter type, and socioeconomic status may influence the research process
Application-based	A. Develops research that addresses clinical child psychology
	B. Applies appropriate research methods to increase the knowledge-base in the field while maintaining minimal risk to minor-age participants and families
	C. Interprets data and applies statistical strategies that best address research questions
	D. Maintains an awareness of ethical issues in research, attends to cultural differences in research design, and displays caution in interpretations of research focused on the mental health of ethnic minority or economically disadvantaged youth
	E. Provides research that addresses the biopsychosocial contexts of youth behavior
	F. Provides research designs that meet the needs and demands of community settings (i.e., schools)
	G. Communicates research findings effectively
	H. Effectively collaborates in research teams
	I. Critically evaluates research findings and their application for the field of clinical child psychology

Reflective Practice/Self-Assessment

Predoctoral and internship experiences provide trainees with ongoing opportunities to develop research competency skills specific to the clinical child specialty (Roberts et al., 1998). However, similar to other competency skills in professional psychology, the development of one's research competency is an ongoing process through one's training and professional career as new methods to effectively evaluate and understand various psychological phenomena become available.

Scientific Knowledge and Methods

Competency in this realm may include understanding of various statistical analyses as well as general measurement terminology (e.g., validity, reliability, base rates) obtained through essential coursework and research experiences, as well as clinical practicum experiences (Roberts et al., 1998). Furthermore, training in developmental and clinical research methods often includes cross-sectional and longitudinal methodologies and single-subject and group based designs, as well as an appreciation of family-based research, program evaluation, and prevention research methodologies that are relevant for conducting research with children, adolescents, families, and the socioecological system in which their interactions occur (e.g., schools, medical setting, family, peer groups; Steele & Aylward, 2009). Finally, consistent with the evidence-based treatment and assessment framework of the CCP specialty, clinical experiences should foster an empirical validation approach toward both assessment and treatment cases (Roberts et al., 1998).

Relationships

Research in clinical child psychology is conducted in a vast number of settings (e.g., school, hospital, daycare, community agencies, and mental health center). CCPs should establish and maintain positive relationships with partner agencies and provide the setting with feedback on what the clinical child psychological research literature may offer in return to a particular setting.

Ethical and Legal Standards/Policy Issues

The ethical practice of research for CCPs adheres to the six common values associated with conducting research (i.e., autonomy, beneficence, nonmaleficence, justice, dignity, truthfulness); however, research with children and adolescents raises additional ethical issues, particularly around competence, autonomy, and vulnerability. Research must be approved by an institutional review board prior to initiation of the research in accordance with the approved protocol. The competent CCP is also aware of the unique needs of minor children and develops informed consent and age-appropriate assent procedures. Dissemination of research findings in accordance with the ethical principles of research includes nonfabrication of data and retraction or correction in an erratum for identified errors. Researchers in clinical child psychology should have an understanding of the policy implications of research for youth services where applicable.

Individual and Cultural Diversity

The CCP should have knowledge and an understanding of the inextricable influence of diversity on research in child psychology. This includes inclusion of culturally relevant measures, use of tailored recruitment and retention efforts according to the population under study, an appreciation and integration of cultural differences in the design or interpretation of developmental and clinical research, as well as the relevance of development for culturally diverse youth. It is important for CCPs to establish relationships with members from diverse groups to establish trust and confidence in research participation.

Interdisciplinary Systems

Given that research in clinical child psychology is often conducted in a variety of settings, the CCP should be able to effectively interact with a variety of professionals, such as school psychologists and social workers, and be aware of the shared and divergent concepts of the disciplines. Research may include professionals from a number of settings and fields, and thus the competent CCP should work toward building collaborative and interprofessional relations with these fields.

Supervision/Teaching Competencies

Supervision and teaching of clinical child psychology practice involves demonstrating and reviewing the clinical child psychology trainee's behavior to ensure a trajectory of learning consistent with professional expectations. Although most obvious at the graduate school level, supervision of clinical practice and research is actually a process over the course of one's career as clinical supervision can occur after a doctoral degree and postlicensure. As it applies to clinical child psychology, the process of supervision is especially focused on the supervisee's ability to understand the unique needs of the developing child and the child in context of their relationships and environment. A competent CCP supervisor is aware of the importance of facilitating self-disclosure by the supervisee of any potential challenges that may negatively impact intervention (e.g., emotional reactions to clients, managing conflicts across systems of care). Like other specialties, a part of this area includes modeling and encouraging commitment to the profession through memberships in profession-serving organizations and an understanding by CCPs of the learning process. Developing supervision skills in the specialty of CCP requires being supervised by a competent specialist CCP (Roberts et al., 1998). Supervision/teaching knowledge-based and application-based competencies are reflected in Table 5.

Reflective Practice/Self-Assessment

A CCP whose professional work includes the review of supervisees is aware of the process of learning. Supervisors have a duty to know the skill level of the supervisees who are being supervised as well as provide opportunities for them to demonstrate their emerging skills (i.e., scaffolded supervision). Self-assessment for this competency means that the supervisor reflects on their relationship with supervisees, is aware of the needs of their supervisees, understands the complexities of the supervisor role, and reviews how supervision is working to benefit the development of

Table 5

Supervision-Teaching Competencies in Clinical Child Psychology

Knowledge-based	A. Understanding of the educational and practice needs of trainees
	B. Understanding of ethical guidelines regarding supervision and training
	C. Understanding of the role of culture in the supervisee relation
	D. Awareness of the changing nature of the field and how to adapt training to meet current demands or needs in the field
	E. Knowledge of the skills and competencies required to be a clinical child psychologist
	F. Understanding of the teaching process and how to adjust instruction to meet the professional needs of the trainee
Application-based	A. Ongoing assessment of trainee progress with clear benchmarks for progress and how progress is demonstrated and evaluation of the quality of supervision, continual and regular feedback to trainees on their progress
	B. Opportunities for trainees to have direct contact with and practice skills with youth and families with clinical-level needs, matching the training need of the trainee to the referral question of the client
	C. Modelling of professional conduct (i.e., professional organization membership, demonstrating an interest in continuing education across the professional continuum) and abiding by ethical principles for clinical child psychologists
	D. Awareness of the sensitive nature of the training relationship and identifying possible areas for growth in supervision

competency. Of particular importance is the CCP's ability to demonstrate a commitment to the profession. For example, the competent CCP practitioner models dedication to the professional field by membership in professional organizations (e.g., CPA, APA, and its Division 53 Society of Clinical Child and Adolescent Psychology and Division 54 Society of Pediatric Psychology as well as their respective state or provincial psychological association) and participation in professional development training.

Scientific Knowledge and Methods

Although the literature on how to train clinical child psychologists is limited, the field has many examples of how training in psychology in general is best done (Roberts & Sobel, 1999; Roberts & Steele, 2003). In this vein, CCPs are knowledgeable on current research and methods for teaching. CCPs work effectively with the latest information to address the unique issues and challenges associated with working with youth and youth-serving agencies. CCPs are aware of the knowledge base for working with youth and families and the role of other professionals in maintaining the mental health of youth and transfer this knowledge to their supervisees.

Relationships

Creating and maintaining productive relationships are key to effective and competent work of CCPs. CCPs also train students to

assert their professional autonomy and identity and provide a model for collaboration for professionals as they develop. CCPs who work with supervisees are able to create a learning environment where they are able to grow their skills and demonstrate their learning. Providing timely and useful feedback and modeling of techniques, strategies, and application of the empirical foundations of clinical child and adolescent practice are paramount to relationship competence. For example, according to the Revised Competency Benchmarks in Professional Psychology (APA, 2012), a competent CCP would demonstrate knowledge and application of models of supervision and how these models can be used in practice.

Ethical and Legal Standards/Policy Issues

CCP specialists engage in ethical behavior and model ethical behavior for supervisees. CCPs may instruct them on the ethical practice of research and clinical practice in either didactic or practice settings (e.g., discuss ethical issues which arise in the context of clinical cases). CCPs are particularly sensitive to the vulnerability of youth mental health and ensure that supervisees are provided with oversight in maintaining ethical behavior. According to the Benchmarks (APA, 2007), a competent supervisor has a command of the relevant ethical and legal issues for supervision (i.e., dual roles, documentation and review of trainee case notes) and identifies them to supervisees.

Individual and Cultural Diversity

As supervisors or teachers, CCPs are able to appreciate different cultural learning styles and values in their work. Cultural diversity competence is demonstrated when CCPs evidence sensitivity to individual differences in development, adjust their supervision to meet the needs of the mentee, and provide accurate instruction about how culture may influence the mental health of youth and families. For example, CCPs are able to evaluate how developmental expectations for child behavior may differ across cultural groups and are able to provide instruction to student-therapists on how best to adapt parent training intervention to match the culture of the client.

Interdisciplinary Systems

CCPs work with youth and families across several systems of care requiring interprofessional functioning. CCPs provide exposure to trainees on interactions with these other systems and model effective working relationships with other systems. In doing so, CCPs also provide instruction about the skills and competencies required of other disciplines and health professionals who work with youth, often in multidisciplinary teams with the CCP.

Management/Administration Competencies

The CCP often assumes management and administrative roles in a variety of practice settings (Finch et al., 2012; Jackson et al., 2010). This functional competency in professional psychology involves "managing the practice of mental health services and/or the administration of health organizations, programs, and agencies" (Rodolfa et al., 2005, p. 351). Fouad et al. (2009) elaborated this competency as "managing the direct delivery of services . . . and /or the administra-

tion of organizations, programs, or agencies" (p. S23). Foundational competencies are inherently related to these functional competencies, especially those in ethical and legal standards, relationship building and maintenance, interdisciplinary systems, and cultural diversity. Specific management-administrative knowledge-based and application-based competencies are reflected in Table 6.

Reflective Practice/Self-Assessment

As administrators, CCPs should be vigilant that their management of the agency or organization or training program is consis-

Table 6
Management-Administration Competencies in Clinical Child Psychology

Knowledge-based	A. Clinical practice development and management (referral, consultation, and sharing of information agreements, confidentiality for minors in treatment, policies and community practices about child, adolescent, and family services, informed consent)
	B. Ethical and professional standards of conduct and oversight of others in administration and leadership roles (including record keeping guidelines and maintenance of case records, APA Ethical Principles and Code of Conduct)
	C. Legal requirements and mandates including those specific to children and vulnerable populations and how to implement through administrative functions (HIPAA, child abuse reporting mandates, consent to treatment, court-ordered assessment/treatment of minors, the Individuals with Disabilities Education Act, and child custody law and judgments)
	D. Business principles and procedures (including creating business plans in the practice of clinical child and adolescent psychology, fiscal management and budgeting, maintenance of financial records, fee collection/ insurance billing, tax requirements for small businesses of independent practice and for larger businesses of group practice or agencies in child and family mental health and health care)
	E. Organizational policies and procedures for individual practice and agency management in service delivery for children, adolescents, and their families
	F. Principles and practices of quality improvement in health care organizations (including independent psychological practices, group practices, children's services in mental health centers, pediatric clinics, and hospitals)
Application-based	A. Initiates development, articulation, implementation, and outcomes evaluations of child and family-oriented agency (or practice) goals and mission
	B. Develops leadership skills in guiding, directing, and evaluating others in accomplishing goals and fulfilling the mission of providing services in clinical child and adolescent psychology
	C. Works collaboratively with other professionals both within and outside of clinical child psychology
	D. Demonstrates ethical behavior and ability to follow legal mandates that guide professional practice

tent with the needs of the members of the group. For example, in clinical training, program directors should ensure that the curriculum is adequate to effectively train students to think critically and develop competence in their practice of the clinical child psychology specialty. Students have to learn the ethical and legal standards of clinical and research practice; and for those who plan to operate an independent practice, training programs may also need to instruct students on how to manage a small business. Management skills are important, and CCPs are encouraged to provide and assess not only the content of training or continuing education opportunities for students and staff but also to ensure that the mission of the agency or organization meets the mental health needs of the youth served by the organization.

Scientific Knowledge and Methods

Scientific evidence is one of the guiding principles of clinical child psychology and so, too, is it relevant for administrative functions of CCPs. Administrators must ensure that there are adequate opportunities for training in the scientific standards of practice and research methods and that any research projects that include youth meet scientific standards. Moreover, for agencies serving youth, it is critical that administrators create a system for regular and useful review of the outcomes of clinical work. Although individual CCPs may include assessment of treatment progress, for example, it is also important that documentation and evidence of clinical progress be a value and systematic practice in any youth-serving mental health organization.

Relationships

Because clinical work with youth requires inclusion of and positive relationships with caretakers, it is also important that administrators and organizations that serve youth and families have positive working relationships with other agencies. We have stressed the importance of the role of development and systems in which children live (i.e., schools, families). It is also important that administrators in agencies that serve youth or train CCP trainees develop and support positive working relationships with other agencies that serve youth. Administrators are charged with ensuring that the reputation of CCPs under their supervision is a positive one and that nonpsychological professionals view CCPs as providing a useful service. Moreover, training directors of training programs in clinical child psychology must also ensure that the learning environment in the program is healthy and is conducive to learning.

Ethical and Legal Standards/Policy Issues

Ethical behavior is germane to the practice of clinical child psychology and administrators must provide clear guidance in demonstrating ethical behavior. Although true for all specialties in professional psychology, the importance of ethical practice takes on perhaps greater importance given the population of youth served by CCPs. All training programs and accreditation bodies require that ethical standards be followed, but for CCP administrators, given the potential vulnerability of youth and families, it is especially important that ongoing review and assessment of ethical conduct across the agency be monitored and reviewed.

Individual and Cultural Diversity

CCPs appreciate cultural differences both in the clients they serve and in the agencies or organizations where they work. For the latter, it is imperative that CCP administrators create an environment of tolerance for individual differences and an open policy for sharing different values. More than a nod at political correctness, appreciation for cultural differences is a critical part of providing effective service and requires a top-down approach where the organization and administration openly demonstrate a value for cultural differences and encourage and recruit individuals who broaden the cultural representation of the organization.

Interdisciplinary Systems

The practice of clinical child psychology, in addition to psychotherapeutic and assessment interactions with the child and adolescent client and their families, also inherently requires interacting with a variety of disciplines and professions, agencies and systems, and the individuals staffing those professions and agencies. For example, the specialty health care provider often works with pediatricians, psychiatrists, social workers, teachers and principals, personnel in social services agencies, judges and lawyers in juvenile and family court, and law enforcement.

Management and administration competencies are complex skills and become developed through becoming aware of these roles early in doctoral training and gaining exposure and experience over the professional developmental levels, by accessing the organizational and leadership literature, and by participating in the management and administrative hierarchies in their programs and agencies. These will include experiential activities such as proper maintenance of records and billing, human resources policies, agency mission and policy development, program evaluation and quality improvement procedures, and developing business plans (Fouad et al., 2009). Thus, the specialist needs to develop business skills and "people management" skills. Most doctoral programs cannot provide much formal training in the leadership, management, and administration of others in their direct delivery of services or in the administration of service units. Consequently, the professional will need to develop these functional competencies through early and continued observation and exposure with knowledge gained via study, experience, and supervision. Table 6 outlines both general and specialty-specific competencies in management-administration.

Conclusions

This paper provides the first detailed description of how the Competency Cube can be applied to the specialty clinical practice of clinical child psychology. Given that discussions about competencies in psychology are growing, the field of clinical child and adolescent psychology will benefit from ongoing review and revision of the definitions and applications of competencies. Thus, we view this paper as one step in this process.

Several important resources have been developed to ensure that professionals are able to continually assess their competence. For example, Division 53 of the American Psychological Association, in partnership with Florida International University, is developing an online training program for professionals to learn about

evidence-based practice with youth. The Division has also developed a website (http://www.effectivechildtherapy.com), where professionals and the lay public can find information about evidence-based treatments for a range of psychological disorders in youth.

The information presented here is an initial articulation which may assist professionals in the field who would like to acquire and assess their competency in clinical child and adolescent work as well as inform doctoral training programs that are preparing the next generation of professionals to become specialists in clinical child and adolescent psychology. The field benefits most when those in academia and training and those directly in the field share in the process of establishing a set of competencies. Training should be directly tied to the actual functioning of CCPs in various settings (e.g., specialty practices, including independent and group practice, mental health centers, child guidance clinics, children's hospitals, and schools). Consequently, we hope this application of the Competency Cube to the clinical child psychology specialty will assist in this dialogue and will, moreover, facilitate discussions with those who evaluate the work of psychologists.

References

American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. *American Psychologist, 57,* 1060–1073. doi:10.1037/0003-066X.57.12.1060

American Psychological Association. (2007). *Assessment of Competency Benchmarks Work Group: A developmental model for the defining and measuring competence in professional psychology.* Retrieved from http://www.psychtrainingcouncils.org/Comptency%20Benchmarks.pdf

American Psychological Association. (2010). *Ethical principles of psychologists and code of conduct.* Retrieved from http://www.apa.org/ethics/code/index.aspx

American Psychological Association. (2012). *Competency benchmarks in professional psychology.* Retrieved from http://www.apa.org/Ed./graduate/revised-competency-benchmarks.aspx

Brown, R. T., Antonuccio, D. O., DuPaul, G. J., Fristad, M. A., King, C. A., Leslie, L. K., . . .Vitiello, B. (2008). *Childhood mental health disorders: Evidence base and contextual factors for psychosocial, psychopharmacological, and combined interventions.* Washington, DC: American Psychological Association. doi:10.1037/11638-000

Fadiman, A. (1997). *The spirit catches you and you fall down.* New York, NY: Farrar, Straus & Giroux.

Finch, A., Lochman, J. E., Nelson, W. M., & Roberts, M. C. (2012). *Specialty competencies in clinical child and adolescent psychology.* New York, NY: Oxford University Press.

Fouad, N. A., Grus, C. L., Hatcher, R. L., Kaslow, N. J., Hutchings, P. S., Madsen, M. B., . . . Crossman, R. E. (2009). Competency benchmarks: A model for understanding and measuring competence in professional psychology across training levels. *Training and Education in Professional Psychology, 3*(4, Suppl), S5–S26. doi:10.1037/a0015832

France, C. R., Masters, K. S., Belar, C. D., Kerns, R. D., Klonoff, E. A., Larkin, K. T., . . . Thorn, B. E. (2008). Application of the competency model to clinical health psychology. *Professional Psychology: Research and Practice, 39,* 573–580. doi:10.1037/0735-7028.39.6.573

Hatcher, R. L., & Lassiter, K. D. (2007). Initial training in professional psychology: The practicum competencies outline. *Training and Education in Professional Psychology, 1,* 49–63. doi:10.1037/1931-3918.1.1.49

Jackson, Y., Alberts, F. L., & Roberts, M. C. (2010). Clinical child psychology: A practice specialty serving children, adolescents, and their families. *Professional Psychology: Research and Practice, 41,* 75–81. doi:10.1037/a0016156

Kaslow, N. J., Borden, K. A., Collins, F. L., Forrest, L., Illfelder-Kaye, J., Nelson, P. D., . . . Willmuth, M. E. (2004). Competencies Conference: Future directions in education and credentialing in professional psychology. *Journal of Clinical Psychology, 60,* 699–712. doi:10.1002/jclp.20016

Kazak, A. E., Hoagwood, K., Weisz, J. R., Hood, K., Kratochwill, T. R., Vargas, L. A., & Banez, G. A. (2010). A meta-systems approach to evidence-based practice for children and adolescents. *American Psychologist, 65,* 85–97. doi:10.1037/a0017784

Lambert, W., Salzer, M. S., & Bickman, L. (1998). Clinical outcome, consumer satisfaction, and ad hoc ratings of improvement in children's mental health. *Journal of Consulting and Clinical Psychology, 66,* 270–279. doi:10.1037/0022-006X.66.2.270

Roberts, M. C., Carlson, C. I., Erickson, M. T., Friedman, R. M., La Greca, A. M., Lemanek, K. L., . . . Wohlford, P. F. (1998). A model for training psychologists to provide services for children and adolescents. *Professional Psychology: Research and Practice, 29,* 293–299. doi:10.1037/0735-7028.29.3.293

Roberts, M. C., & Sobel, A. (1999). Training in clinical child psychology: Doing it right. *Journal of Clinical Child Psychology, 28,* 482–489. doi:10.1207/S15374424JCCP2804_7

Roberts, M. C., & Steele, R. G. (2003). Predoctoral training in pediatric psychology at the University of Kansas Clinical Child Psychology Program. *Journal of Pediatric Psychology, 28,* 99–103. doi:10.1093/jpepsy/28.2.99

Rodolfa, E., Bent, R., Eisman, E., Nelson, P., Rehm, L., & Richie, P. (2005). A cube model for competency development: Implications for psychology educators and regulators. *Professional Psychology: Research and Practice, 36,* 347–354. doi:10.1037/0735-7028.36.4.347

Ross., A. (1959). *The practice of clinical child psychology.* Oxford, UK: Grune & Stratton.

Routh, D. K. (1994). *Clinical psychology since 1917.* New York, NY: Plenum.

Spirito, A., Brown, R. T., D'Angelo, E., Delamater, A., Rodrigue, J., & Siegel, L. (2003). Society of Pediatric Psychology task force report: Recommendations for the training of pediatric psychologists. *Journal of Pediatric Psychology, 28,* 85–98. doi:10.1093/jpepsy/28.2.85

Stark, L. J. (2010). Introduction to the special issue: Quality improvement in pediatric psychology. *Journal of Pediatric Psychology, 35,* 1–5. doi:10.1093/jpepsy/jsp088

Steele, R. G., & Aylward, B. S. (2009). An overview of systems in pediatric psychology research and practice. In M. C. Roberts & R. G. Steele (Eds.), *Handbook of pediatric psychology* (4th ed., pp. 649–655). New York, NY: Guilford.