International education and training for clinical child and adolescent psychology

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Abstract
Psychological problems in youth and adequate mental health service delivery to children, adolescents, and families are critical public health dilemmas around the world. Central to effectively addressing the mental health needs of youth and families is focusing attention on the evaluation and development of specialized training programs in clinical child and adolescent psychology. All countries to more or less degree face challenges, but lower-income countries have additional limitations (e.g., scarce resources for training, high demand for services, cultural barriers) to establishing clinical psychology programs and specialized services for children and adolescents. This article discusses the status of efforts in the United States to define clinical child and adolescent psychology and develop standard training recommendations for mental health providers who work with youth and families, international considerations for intervention implementation and training, and future directions in the field of clinical child and adolescent psychology.

Keywords
Clinical child and adolescent psychology, education, future directions, international, South Africa, training

Psychological issues in youth are a primary public health issue. Despite the significant mental health problems and needs for services for children, adolescents, and families, many continue to be underserved internationally. While especially true in low- and middle-income countries, these problems are also evident in countries with more resources (World Health Organization [WHO], 2010). This is a worldwide issue; however, recent statistics presented by the WHO indicate that
low- and middle-income countries have a particular dearth of mental health providers. For example, South Africa has as few as .27 psychiatrists and .31 psychologists per 100,000 citizens compared with another lower-income country of Lebanon with 1.41 psychiatrists and 2.12 psychologists, and the higher-income country of the United States with 7.9 psychiatrists and 29.03 psychologists (WHO, 2011). Unfortunately, data on mental health concerns for South African youth are limited; though, data provided by the WHO World Mental Health Surveys indicate that as many as 25% of South Africans report a lifetime prevalence of some psychological disorder (Kessler et al., 2009). WHO data from other countries are similar to South Africa and indicate a significant gap between potential need and available providers, likely affecting service use even without taking into consideration a host of other barriers that may also impact service use (e.g., stigma, unawareness of psychological issues, financial limitations).

Several reasons for mental health underservice and underutilization have been posited within the literature. For one, there is a lack of government policies in many countries, which impacts provision of services for those in need. Although most countries in the world signed the 1989 United Nations Convention on the Rights of the Child which includes children’s mental health considerations, this endorsement has not been associated with the development and implementation of specific policies and programs for child and adolescent mental health services (e.g., Belfer, 2007; Harper & Çetin, 2008). Indeed, less than 10% of countries worldwide were identified as having a policy specific to youth mental health according to a 2002 survey (Belfer, 2007; Shatkin & Belfer, 2004). Additionally, the countries that have stated policies tended to focus primarily on services for child abuse rather than broader child mental health concerns (Belfer & Saxena, 2006). Furthermore, just because a country might have a policy does not necessarily mean that they have a program or process to implement these services (e.g., in the United States: Gould, Beals-Erickson, & Roberts, 2012; Gould, Roberts, & Beals, 2009). Many countries, in fact, lack a government entity responsible for organizing mental health treatment for youth, as well as funding allocated within countries’ budgets specifically for youth mental health services. Consequently, the majority of the treatment costs must be paid out of pocket by the individual or family which can be a burden particularly in low- and middle-income countries (e.g., Belfer, 2008; Kieling et al., 2011).

Adequately training providers to implement treatment poses as another challenge for many countries, such that there is a dearth of training standards, problems training enough providers who have access to youth in need, and a lack of utilization of available resources (e.g., Belfer & Saxena, 2006; Kieling et al., 2011). Although pediatricians and other primary health care professionals could potentially serve as mental health care providers, in many countries they are not adequately trained to provide these services to youth. Because children and adolescents in need also interact with other professionals, supplemental training could be extended to these professionals; however, many countries currently do not utilize this group as a potential resource in providing mental health services (Belfer & Saxena, 2006).

There are also cultural ideas that may contribute to underservice of mental health services for children and adolescents. In some instances, beliefs may be present that society should not interfere with parental attitudes and behaviors regarding their children. Additionally, mental health services for children may be viewed as a luxury that many families cannot take advantage of or is secondary to physical concerns (cf. Harper & Çetin, 2008). Also, lack of awareness may impact the underservice of mental health concerns. For example, individuals may not be aware of the crucial interplay between children and adolescents’ mental and physical health (Harper & Çetin, 2008; Kieling et al., 2011). Preadolescence represents an especially sensitive period, as previous work indicates that lifetime prevalence of psychological disorders is evident before 14 years of age (Belfer & Saxena, 2006). Psychopathological symptoms may also be overlooked and thought of as normative (Hoven et al., 2008). Finally, stigma surrounding and minimization of mental health
concerns, across ages, continue to be a problem worldwide and contribute to the underutilization of services (e.g., Harper & Çetin, 2008; Kieling et al., 2011).

What is clinical child and adolescent psychology?

As society’s awareness of children’s mental health needs has increased in recent decades, the specialty of clinical child and adolescent psychology in some countries has evolved in order to help meet those needs, although appearing under different nomenclature. The formal definition, recognized by the American Psychological Association (APA) in 2005, characterizes clinical child and adolescent psychology as

a specialty of professional psychology which brings together clinical psychology with a thorough background in child, adolescent, and family development and developmental psychopathology. Clinical child and adolescent psychologists conduct scientific research and provide psychological services to infants, toddlers, children, and adolescents . . . focused on understanding, preventing, diagnosing, and treating psychological, cognitive, emotional, developmental, behavioral, and family problems of children. (Council of Specialties in Professional Psychology, 2015)

Alternative descriptions are somewhat narrower in scope, emphasizing what are perhaps the core services that clinical child psychologists provide to the public: the “assessment and treatment of mental, physical, emotional, and behavioral disorders limited to children and adolescents” (American Board of Professional Psychology [ABPP], 2015; see also APA, 2015). Others have remarked that clinical child and adolescent psychology has much in common with clinical, school, and clinical health psychology, though, with some unique components (Finch, Lochman, Nelson, & Roberts, 2012).

Taken together, these descriptions and definitions hint at the diversity of the work that clinical child and adolescent psychologists do, but they hardly paint a full picture. In terms of work settings, clinical child psychologists work in community mental health centers, hospitals, private/independent practice, residential/inpatient centers, schools, universities, and other research and practice settings (Roberts, Biggs, Jackson, & Steele, 2011). In terms of professional activities, clinical child and adolescent psychologists perform work ranging from treatment, assessment, and consultation, to research, teaching, program evaluation, and policy work (Finch et al., 2012). Within clinical child and adolescent psychology—which is itself a deep and broad specialty of psychology (Roberts, 2006)—it has become increasingly common for researchers and clinicians to specialize even further in particular areas of interest. For example, practitioners may specialize in providing treatment for children exposed to maltreatment and trauma; adolescent depression and anxiety; or hyperactive-impulsive and oppositional behavior in young children (Finch et al., 2012; Jackson, Alberts, & Roberts, 2010). Indeed, in light of their extensive specialized training (discussed below), clinical child and adolescent psychologists are qualified—or, if not, are capable of becoming qualified—to perform a wide array of professional activities in a variety of work settings.

It is important to note that clinical child and adolescent psychology is more than simply applying the knowledge and techniques of clinical psychology to younger populations. Such a “downward extension” model is inappropriate because the knowledge and practices of general clinical psychology are largely derived from work focusing on populations of adults rather than children and families—a de facto “adult clinical psychology” (Roberts et al., 1998). As a result, general clinical psychology is positioned to (a) serve needs of adults, which sometimes do not even apply to children, and often do not apply in the same manner; and (b) ignore the unique developmental,
social, and cultural factors, which are critical to providing effective services for children, adolescents, and families (Roberts et al., 1998). In many respects, clinical child and adolescent psychology exists to help fill these gaps.

Currently, and within the United States, clinical child and adolescent psychology has generally become well-recognized as an important and necessary contribution to the understanding, assessment, and treatment of children’s mental health problems. Yet, this has not always been the case; nor is it currently the case in many other countries. Psychological research and practice focusing on children and adolescents emerged in the late-19th and early-20th centuries, with the work of pioneers such as G. Stanley Hall, Lightner Witmer, Alfred Binet, Sigmund Freud, and John Watson. Yet, it has only been within the past half century that clinical child and adolescent psychology has truly developed and been accepted as a specialty (Finch et al., 2012). The 1960s and 1970s witnessed the earliest iterations of the official professional organization (now known as APA Division 53: Society of Clinical Child and Adolescent Psychology) and journal (Journal of Clinical Child and Adolescent Psychology; Finch et al., 2012). In more recent years, the specialty has been further legitimated by formal recognition (APA, 2015; Council of Specialties in Professional Psychology, 2015), board certification (ABPP, 2015), as well as the establishment of numerous journals and conferences in the United States and available internationally. Still, there remains a substantial need for the services offered by clinical child and adolescent psychologists, particularly low- and middle-income countries, but also in the United States. Moreover, conceptualizations of clinical child and adolescent psychology must be tailored to the unique needs of the sociocultural context.

Current conceptualizations of clinical child and adolescent psychology are perhaps best characterized by several “values,” which include (a) an emphasis on evidence-based practice, (b) an appreciation of children’s multiple social contexts, and (c) an understanding of normal and abnormal developmental processes (Finch et al., 2012; Jackson et al., 2010). The historical development of clinical child and adolescent psychology is very much intertwined with that of the evidence-based practice (EBP) movement in psychology, which emphasizes the integration of evidence-based assessment and treatment, clinician expertise, and consideration of client characteristics and preferences (APA Presidential Task Force on Evidence-Based Practice, 2006). Indeed, clinical child and adolescent psychology tends to focus on methods of assessment and treatment that are grounded in higher degrees of empirical support (Kazdin, 2014; Mash & Hunsley, 2005; Steele, Elkin, & Roberts, 2008; Weisz & Kazdin, 2010; see also http://effectivechildtherapy.com/).

Clinical child and adolescent psychology’s emphasis on children’s social contexts and developmental processes is often a characteristic feature of effective interventions. For example, services that target multiple components of a child’s social system (e.g., parents, teachers, and the child, rather than the child alone) are often more effective in treating Attention-Deficit/Hyperactivity Disorder (ADHD; S. W. Evans, Owens, & Bunford, 2014) and bipolar spectrum disorders (Fristad & MacPherson, 2013). Another aspect of this ecological approach is service coordination and multidisciplinary collaboration, in an effort to better understand and address the full scope of children’s problems across multiple settings and from multiple perspectives (Finch et al., 2012; Jackson et al., 2010). Similarly, clinical child and adolescent psychology emphasizes assessment of a child’s emotional and cognitive abilities and tailoring interventions to their developmental level (Finch et al., 2012; Jackson et al., 2010). As one example, trauma-focused cognitive-behavioral therapy (TF-CBT) has been identified as a well-established intervention for children coping with exposure to trauma and maltreatment (Silverman et al., 2008). Although TF-CBT for children involves the same principles and underlying theory as cognitive-behavioral treatment for adults with post-traumatic stress disorders, the delivery of TF-CBT to youth involves more developmentally appropriate and child-friendly techniques (e.g., drawing, play) and extensive parental involvement (J. A. Cohen, Mannarino, & Deblinger, 2012).
Contributing to the mental health underservice of youth and families—across all countries—are the limitations of education and training in clinical child and adolescent psychology. Without adequate number of service providers specifically trained to provide assessment and intervention to children, the gap between need and availability of services remains a dilemma internationally.

Standards for training are non-existent in many areas of the world and lack enforcement in many others (Belfer & Saxena, 2006, p. 552). The level of training for professional psychologists (e.g., education length, course content, licensing requirements, specialty training) varies across countries and involves input from regulatory bodies, legislative requirements, and academic and professional organizations (Helmes & Pachana, 2005). Compared with other health professions (e.g., medicine, nursing), psychology is far from having international agreement on training standards (Helmes & Pachana, 2005). In the United States, standards of training and practice were first formulated in 1949 as the scientist-practitioner model. The definition of scientist-practitioner has been modified over the years, yet it is generally accepted to mean “an integrative approach to science and practice wherein each must continually inform the other.” As such, a scientist-practitioner is a psychologist who demonstrates “a research orientation in their clinical practice and a practice relevance in their research” (Belar & Perry, 1992, p. 72). Therefore, education and training in the scientist-practitioner model involves knowledge and skill development that combines research and clinical practice. The adoption of the scientist-practitioner training model by other countries is growing (Helmes & Pachana, 2005).

Central to the scientist-practitioner model in clinical practice is the utilization of EBP (Kazdin, 2008). Doctoral training programs, by adhering to a scientist-practitioner model, foster the adoption of the EBP approach to clinical practice (Hersen, Drabick, & Vivian, 2012). In terms of the scientist-practitioner model and EBP approach to clinical child and adolescent psychology, there are several areas needed for adequate training. In the United States, standard training guidelines for clinical child and adolescent psychology have developed substantially over the past 20 years and are presented in Table 1. Training in these areas can be obtained through a combination of academic coursework, supervised applied experiences (e.g., practicum, externships, pre-doctoral internships), and supervised research projects. The aim is for trainees to receive “exposure in all areas, experience in many areas, and expertise in at least some areas” during graduate, internship, and post-doctoral training (Roberts et al., 1998, p. 295). Given that the skills needed to work with children, youth, and families differ from those needed in work with adults (Roberts, Erickson, 2005).
& Tuma, 1985), establishing consensual standards of specialty training is critical for ensuring that there are properly qualified providers to address the growing need for mental health services for youth and families.

Furthermore, recent efforts have been made to operationalize what it means to be a competent clinical child psychologist, or one who is “qualified and capable in understanding and performing clinical work with youth and families in an effective manner” (Jackson, Wu, Aylward, & Roberts, 2012, p. 433). Clinical child psychologists’ knowledge- and application-based areas of competency include: assessment and diagnosis, intervention, consultation, research, supervision-teaching, and management-administration. Within each of these areas, clinical child psychologists should demonstrate the ability to reflect and assess their work, utilize scientific knowledge and methods, develop positive working relationships, adhere to ethical and legal standards, appreciate individual and cultural diversity, and collaborate with other professionals working with youth and families (Jackson et al., 2012). Establishing such competencies helps to guide training in clinical child and adolescent psychology. This notion of a competent clinical child psychologist illustrates the movement toward clinical child and adolescent psychology standing as a distinct field, rather than a subspecialty of general or adult psychology.

Increasing attention is now given toward the training needs, scientific and practice approaches, knowledge base, and public policy unique to child and adolescent mental health (Pristein & Roberts, 2006). In the United States, graduate training in clinical child and adolescent psychology can occur through “track training” in which there are specific child tracks within general clinical psychology programs (e.g., University of Miami, University of Alabama). Prinstein and Roberts (2006) reported that there are approximately 30 PhD programs offering formal training in clinical child and adolescent psychology as a track, concentration, or emphasis. Pre-doctoral internship training can also be offered through tracks. A less common option is “focused training” in clinical child and adolescent psychology as stand-alone graduate programs (e.g., University of Kansas, University of Denver); there are three such specialized training programs in the United States (Pristein & Roberts, 2006).

**International considerations**

**Interventions**

There has been increasing support for the use of evidence-based treatments (EBTs), or interventions that have demonstrated efficacy in controlled trials (Kazdin, 2008; Steele et al., 2008), in the global mental health field for countries with large populations of families living in low- and middle-income countries (Murray et al., 2014). In 2010, the WHO supported the use of EBTs in their agenda for promoting their Mental Health Gap Action Program (mhGAP; WHO, 2010). The mhGAP aims to promote services for mental health disorders across nations through providing resources (e.g., publications, reviews of interventions, protocols for clinical decision making). For example, the mhGAP provided a succinct review of the effectiveness of psychosocial interventions for child and adolescent disruptive behavior problems. This review presented current research and meta-analytic reviews, as well as recommendations for intervention implementation (WHO, 2015). One of the reviewed programs included the Triple P Parenting Program, which is a cognitive-behavioral group-based parenting program that incorporates differing levels of intensity (primary, secondary, and tertiary intervention and prevention). These levels or steps of intervention—from psychoeducational public service materials to group treatment to individual parent management training—may provide the potential to reach more children and families than dyadic child-parent therapies alone. Perhaps given this potential to reach more individuals, Triple P has expanded over the years to implementation in more than 20 countries and 18 languages (Sethi, Kerns, Sanders, & Ralph, 2014).
Specifically in South Africa, implementation of the aims from the mhGAP initiative and incorporation of EBPs has taken hold, for instance, TF-CBT to treat children who have experienced trauma. Results of TF-CBT studies suggest that South African children and families have reported positive changes, increased positive family relationships, and enhanced communication (Murray et al., 2014). However, the relatively nascent field of clinical psychology in South Africa has been critiqued for commonly practicing interventions that lack empirical support and are based on intuition and traditional psychology approaches (Kagee, 2006, 2014). Given the limited financial resources, lack of qualified mental health professionals, cultural barriers to treatment, and challenges and costs of clinical training, it is important that low- and middle-income countries utilize evidence-based assessment and treatment to ensure the highest likelihood of successful outcomes (Kagee, 2006, 2014). One way to increase the use of EBP in developing countries, such as South Africa, is to focus on training psychologists entering the field in the scientist-practitioner approach.

Furthermore, the unique experiences of youth in lower-income countries are not typical considerations in mental health interventions that are often developed in Western or higher-income countries. However, the literature on interventions and policies in low- and middle-income countries is growing (e.g., child and adolescent mental health in war-ridden Iraq [Al-Obaidi, Budosan, & Jeffrey, 2010]; TF-CBT in Zambia [Murray et al., 2014]). Kieling et al., (2011) provided a comprehensive overview of available research in epidemiology, interventions, and implementation strategies for child and adolescent mental health in low- and middle-income countries. Randomized control trials of interventions included the following: universal early childhood interventions (e.g., early stimulation and nutritional interventions, high-quality preschool programs); universal and selective interventions for behavioral and emotional disorders (e.g., school-based prevention programs, school-based psychosocial group treatment, parent training integrated into health services, home visitation); and universal and selective interventions for intellectual disorders (e.g., nutritional assistance, reduction of exposure to toxins, prenatal health interventions, accident/injury and abuse prevention; Kieling et al., 2011).

The recommendations for effective interventions in countries with less resources share some similarities to the recommendations of EBPs with ethnic, linguistic, and cultural minority populations in the United States (e.g., Council of National Psychological Associations for the Advancement of Ethnic Minority Interests, 2003). To determine need and appropriate interventions, it is recommended that mental health professionals in low- and middle-income countries: assess the extent and nature of problems within the community; target risk and protective factors for child and adolescent mental health in the specific setting; utilize evidence-based interventions with cultural flexibility by building on existing practices or strengths of the community; pilot and assess interventions in new settings; and provide staff with training and continued support (Kieling et al., 2011). Furthermore, to ensure sustainability of interventions in low- and middle-income countries, it is advised that psychologists and mental health professionals: aim to promote ownership and buy-in from key stakeholders (e.g., national and local leaders, religious leaders, parents, teachers) by including them in the development and implementation of interventions; assess the feasibility of the intervention (e.g., sufficient resources); and ensure that interventions fit with existing attitudes and beliefs (Kieling et al., 2011).

Training programs

International programs have developed unique perspectives to training clinical psychologists. Although the scientist-practitioner approach is the predominant model used in many countries, other training programs may employ an array of stated goals or competencies. Some programs and training models have established immersion modules in order to help their students become aware
of other cultures and experiences. Specifically, Platt (2012) discussed the philosophical foundations and applications of an immersion program to help promote and meet the international needs of children, adolescents, and families in Mexico. The immersion program takes place in Mexico City and aims to increase international clinical competencies in a five-week Spanish immersion program in order to promote a mental health perspective from a global vantage point (Platt, 2012).

Additionally, other training modules have surveyed the mental health needs of their population and generated specific program strategies to meet the demands for mental health services. Weiss et al., (2012) described Capacity Development Targets aimed at meeting the needs of children and adolescents with mental health disorders especially in low- and middle-income countries. The Capacity Development Targets’ components are specifically implemented into a graduate program in clinical psychology in Vietnam focused on identifying research questions concerning the dissemination and efficacy of EBTs and how they may or may not apply to the Vietnamese context. This model may be applicable to other countries.

In South Africa, clinical psychology and formal training programs for the profession are less than 40 years old (Pillay, Ahmed, & Bawa, 2013). Specialized training in clinical child and adolescent psychology in the United States is similarly in its “professional adolescence” (Prinstein & Roberts, 2006). Thus, South Africa’s clinical psychology field and the United States’s clinical child and adolescent psychology field are perhaps at similar stages in focusing on training issues. Recent evaluation of training programs in South Africa document many similarities and differences in structure, as well as challenges, compared with their Western counterparts. For example, in terms of academic and practicum experiences, clinical psychology trainees in South Africa are uniquely required to spend their final two years of school alongside counseling and educational psychology students, to serve a year in health care and psychiatric settings, and to work for a year in community service (Pillay et al., 2013). Similar to other countries, South African academic programs typically ascribe to the scientist-practitioner model yet can differ on theoretical orientation (Pillay et al., 2013). However, others suggest that clinical psychology training programs lack emphasis on evidence-based assessment and treatment which subsequently results in mental health providers underutilizing EBPs in South Africa (Kagee, 2006, 2014).

Pillay et al. (2013) discussed many unique challenges stemming from the political changes that occurred only 20 years ago in South Africa. For example, historically Black institutions, which were disadvantaged by apartheid, continue to struggle with academic staff recruitment and program development especially in rural areas. There also is an underrepresentation of Black psychologists due to recruitment policies during apartheid. While this is also a concern in other countries, some efforts have been made in the United States to increase minority representation (e.g., scholarships and grants for minority students). South Africa is still working toward establishing similar deliberate methods of recruitment which include improving primary and secondary schooling in rural areas. In an effort by clinical psychology to engage in issues of “racial oppression, social inequality, and the great need to heal the psyche of the South African nation,” many training programs in South Africa have included community psychology into their framework (p. 49). Another challenge includes the lack of offering rigorous coursework in scientific methods, statistics, and outcome research as a standard part of integrated training (Kagee, 2006) which also influences the reported lack of emphasis on EBPs by mental health providers.

**Summary and future directions**

Youth mental health issues have received increasing attention at national and international levels. Awareness of the extent of mental health problems worldwide has led to calls for mental health professionals with expertise in child and adolescent psychology. This article aimed to present the
current status of clinical child and adolescent psychology in the United States and draw comparisons and similarities to lower-income countries, especially highlighting South Africa. The following section, “Evidence-based practice,” details the important future directions in training, research, and practice in clinical child and adolescent psychology, broadly and considering international issues.

Evidence-based practice

Continued investigation of EBPs is necessary given the increases in empirically supported assessment and treatments. There is growing research on the evidence for specific interventions, including for specific populations. However, there is a paucity of research on the clinical context and decision-making process by clinicians informed by evidence, expertise, and client characteristics (Kazdin, 2008). Although clinicians’ expertise (e.g., knowledge, cultural sensitivity) and client characteristics (e.g., culture, values, and preferences) are central factors to best clinical practice, there is little research on the influence of these variables on treatment outcomes. This gap may be partly due to the difficulty in empirically assessing clinician and client variables, as well as to the debate between research and practice on what constitutes “evidence” and how it should be integrated into practice (Kazdin, 2008). By investigating each component of EBPs, our understanding of the generalizability of empirically supported treatments will progress, and the gap between clinical research and practice can be bridged.

Another critical area of future research is examining how current EBTs can be applied to a variety of psychopathologies and diverse populations (e.g., culturally, linguistically) (Roberts et al., 2011). Further research is also needed on the effectiveness of EBPs in “real-world settings” rather than highly controlled studies, on methods of dissemination that work best and whether EBPs are effective in various communities, and on the cost-effectiveness of EBPs (Roberts et al., 2011). Evaluation of treatment and assessment in non-Western and low- and middle-income countries is important for understanding the applicability and effectiveness of EBPs in different cultures, languages, socio-economic groups, and so on. There is concern, though, that energy spent documenting, monitoring, and evaluating interventions in lower-income countries will impede on the time and resources vitally needed for service delivery. One solution for low- and middle-income countries, where resources are scarce and the need for services is great, may be to embed evaluation strategies within clinical services (Kagee, 2014), thus minimizing the commitment and cost that large research projects entail.

Mental health treatment needs of underserved

In recent studies surveying expert psychologists in the United States, several future directions for clinical child and adolescent psychology were identified. The highest-ranking future direction was further research on, clinical practice of, and training in evidence-based practice (James & Roberts, 2009). Other major predictions for the future of clinical child and adolescent psychology included: emphasis on prevention and early diagnosis and treatment; increasing clinical services for youth with specific problems; research on the etiology, diagnosis, and treatment of specific youth disorders; research on interactions of biological and social factors in the manifestation of mental health issues and contributions to treatment; specialty training in child and adolescent psychology; and training with emphasis on biological bases of behavior (James & Roberts, 2009). Odar, Canter, and Roberts (2013) added to these future directions by reporting expert psychologists’ opinions on the most significant mental health issues facing youth and families. These problems requiring attention included: the lack of prevention and early intervention; lack of available and affordable mental
health care especially for underserved youth; lack of dissemination of and access to EBP; and lack of public awareness and attention to factors influencing child development. Though these surveys were conducted with psychologists in the United States, many of these issues and future directions are relevant to others, including developing or lower-income countries.

The prevalence of child mental health issues has gained attention at international levels, as evidenced by efforts of the WHO and other agencies to document the psychological problems of youth across the world. Although there is a clear need for intervention and prevention of mental illness in childhood and adolescence, youth and families continue to be underserved internationally. In order to combat these barriers, further investigation is needed on the mental health needs of children and adolescents, effective treatments, and most efficient ways to provide services to underserved populations. The WHO Child and Adolescent Mental Health Atlas documents the global status of services, training, and policy in mental health for youth. However, given difficulties in data collection, the Atlas project concluded that systematic research is needed; the report called for the worldwide development of policies, services, and training in child and adolescent mental health (Belfer, 2008). Psychologists and mental health providers across the world must continue to develop the research evidence, practice, and service innovations that have occurred in child mental health in the past decade (Vostanis, 2007) and to collaborate with professionals in different fields in both research and practice (Roberts et al., 2011).

Recent novel models of treatment delivery have the potential to improve the efficiency of mental health services for underserved populations which may be especially beneficial and more practical for countries where resources and specialized providers are scarce. Kazdin (2015) discussed how training many professionals, including lay counselors, in only a few “translational treatments,” or treatments that have been found effective for multiple diagnoses, can make dissemination of EBPs more feasible. There are also efforts to deliver services in a manner that reaches more individuals, is affordable, draws on nonprofessional workforce, and can be provided in multiple settings (e.g., use of social media and technology, lay individuals to deliver interventions, focus on lifestyle changes, community collaboration; Kazdin, 2015). Adaptation of such models to different cultures, ethnicities, and local conditions is needed but may be applicable to all countries aiming to improve service delivery.

Assessment and diagnostic tools

Assessment and diagnosis has historically been a cornerstone skill of and service provided by clinical psychologists (Youngstrom, 2013). Clinical child psychologists across the world are involved in the revisions of available diagnostic manuals (e.g., the International Classification of Diseases; S. C. Evans et al., 2013; Keeley et al., in press; Roberts et al., 2012; Robles et al., 2015) and in the investigation of the nature and form of mental illness (Roberts et al., 2011). Furthermore, EBP is one of the highest-ranked future directions identified by expert psychologists; however, most discussions of EBP focus more on treatment with less emphasis on assessment. A critical future direction for clinical child and adolescent psychology, then, is the continued development of evidence-based assessment. Improvements in clinically useful assessment instruments are needed to advance accurate identification of psychopathology, appropriate service delivery, and evaluation of treatment outcomes. For example, there are gaps in the accurate assessment and data gathering of the prevalence of child and adolescent psychopathology which has led to inaccurate popular belief of epidemics in disorders such as autism, ADHD, and bipolar disorder (Belfer, 2008). For developing or low- and middle-income countries, some gaps in methodologies include difficulties obtaining multiple reporters, culturally insensitive assessment tools, and lack of access to medical care or schools where initial detection of mental health problems often occur (Belfer, 2008; Kieling et al., 2011).
Given the importance of assessment to identification and treatment of child mental health issues, several future directions of evidence-based assessment have been identified. In terms of future directions for clinical practice, evidence-based assessment of children and adolescents should include: identifying common diagnoses, presenting problems, and base rates of conditions in a given setting; selecting instruments that demonstrate reliability and validity (e.g., L. L. Cohen et al., 2008; Hunsley & Mash, 2008; Mash & Hunsley, 2005; Prinstein, 2012); evaluating risk and moderating factors to help inform diagnoses; using a battery of broad and specialized measures to clarify diagnoses and problems; and gathering data from multiple informants and methods (Youngstrom, 2013). These recommendations of clinical practice are coupled by future directions in research on evidence-based assessment. For instance, more epidemiological studies are needed to determine the rates of diagnoses and presenting problems in various settings and populations, as well as the risk and moderating factors, which will help guide idiographic assessment and decision making (Youngstrom, 2013).

Furthermore, Youngstrom (2013) observed that assessment techniques and methods are set by “habits of training” which then dictate “habits of practice that change slowly if at all” (p. 140). To combat the risk of status-quo, emphasis should be placed on the empirical evidence of tools and on the utility of assessment in making decisions about individual cases which includes consideration of client characteristics (e.g., culture, socio-economic environment). Thus, advanced training of clinical psychologists in assessment that incorporates sensitivity to culture and individualized issues (e.g., impairment) must continue to be a priority of graduate, internship, and post-doctoral training.

Role of policy

Policy, created by legislative bodies, provides a recognizable document supported by law that subsequently guides the development and quality assurance of services (e.g., evaluation, oversight) and advocacy for care (Belfer, 2007). Unfortunately, the process of policy is complicated, and there is a lack of governmental policies addressing mental health service availability for youth and families. Results of the WHO Child Atlas survey indicated that of the 16 low-income countries surveyed, four had a national policy on child and adolescent mental health, one collected epidemiological data, and none had developed a child and adolescent mental health program (as summarized in Belfer, 2008). Central to increasing mental health services for youth and families worldwide is the development of country and regional commitment to mental health via policy in government and non-government agencies (Belfer, 2008).

“The type of policy that truly supports child and adolescent mental health services in an effective manner is one that is specific to child and adolescent mental health, rather than a part of overall mental health policy” because it should address the issues especially relevant to youth development and mental illness (Belfer, 2007, p. 350). For example, systemic issues that have been shown to directly impact child development (e.g., maltreatment, toxic stress) or social contexts that are especially relevant to youth (e.g., school, parents) may identify avenues for policy specifically targeting youth mental health. Furthermore, Harper and Çetin (2008) suggested that international policies on child mental health must have support from more than just mental health professionals; rather, policy must also address the needs and priorities of parents, social service providers, religious leaders, and educators. Children exist within a “context of family, culture, and community”; therefore, to address healthy youth development, attention must be paid to the environmental context as well (Harper & Çetin, 2008). Similarly, it is recommended that specialized mental health services be balanced with addressing the institutions that typically care for youth, such as schools and other community groups (Harper & Çetin, 2008). Especially in countries and communities
where resources are limited, integrating mental health services into existing systems of care is essential for successful intervention.

Finally, current funding for child and adolescent mental health services typically comes from temporary and fleeting sources (e.g., grants), rather than more stable governmental funds (Belfer, 2008). Out-of-country support, such as the WHO projects, often helps to raise awareness and initiate services; however, the challenges for such projects are designing “culturally compatible services” and finding sustainable funding sources (Harper & Çetin, 2008). It is most effective, then, for policy to develop from within the country or community. Proper funding of services relies first on increasing awareness of the prevalence of youth mental health problems and the impact on individuals and society among policy-makers.

**Education and training**

A central way to address the gap between the need for youth mental health services and the availability of competent service providers is to bolster the mental health professional workforce. Therefore, an important future direction of clinical child and adolescent psychology is to focus on the education and training of mental health providers and researchers. Clinical child and adolescent psychology continues to grow as a field separate from general or adult psychology. Further investigation is needed on the best ways to train and assess competency and on how to keep practice and research skills continually updated in providing competent services (Prinstein & Roberts, 2006; Roberts et al., 2011). With the growth of track or focused training comes variability in educational and training experiences (e.g., proportion of faculty with expertise in child mental health, quantity of didactic and practicum experiences; Prinstein & Roberts, 2006). Thus, there is a need to develop and standardize “formal training” in clinical child and adolescent psychology and investigate how such training models lead to competency in working with youth and families. One possible solution is to create and “enforce standards of minimum training experiences” (Prinstein & Roberts, 2006, p. 265) at pre-doctoral and post-doctoral training levels. For instance, there exist opportunities for formal professional certification for post-doctoral programs and individual psychologists to demonstrate and document expertise in clinical child and adolescent psychology (e.g., ABPP).

Clinical psychology continues to grow as a critical role in general health care; however, psychology does not yet have international agreement on training standards, unlike other health professions. “The standardization and acceptance of international standards for training and practice of psychology” is important for further growth and development of psychologists worldwide (Helmes & Pachana, 2005, p. 52). Recent efforts to standardize training in the United States and to investigate how to ensure and measure competency can help to inform the international community on education and training and advance the field toward having international standards.

**International considerations**

While there have been exciting advances in diagnoses, treatment, training, and policies related to child mental health issues, “child mental health services can only grow successfully if they integrate and adapt international experiences in national, sociocultural, and local realities. There is no point in trying to force prescriptive Western models” (Vostanis, 2007, p. 113). For instance, the International Classification of Diseases (ICD)-10 and the Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV diagnostic categories for children and adolescents are often criticized for being inadequate in global epidemiological research (Belfer, 2008). Treatments are also often grounded in Western conceptualization and do not take into account cultural perspectives, heterogeneity within cultures, impairment, and developmental issues (Belfer, 2008). While the use of
evidence-based assessment and treatment is advised in developing countries, questions remain
concerning the cultural applicability and relevance of diagnoses and interventions, as well as the
development of standard training guidelines that are feasible for low- and middle-income countries
to implement (Kagee, 2006).

Additionally, issues unique to lower-income or developing countries create many challenges to
accurate data collection and adequate service delivery. Local realities must be considered in adapt-
ing service delivery. In many low- and middle-income countries where resources are scarce and
physical health issues (e.g., malnutrition) are priorities, integrating mental health services into
existing systems of care and obtaining the support and input from community stakeholders (e.g.,
doctors, teachers, religious leaders) are critical components of successful service delivery (Harper
& Çetin, 2008; Kazdin, 2015; Kieling et al., 2011). Youth in lower-income countries also are more
likely to experience certain stressors than those in Western or higher-income countries. These
stressors include impoverished physical and nutritional status, loss of caregivers or being orphaned,
institutional care, chronic exposure to toxins and violence, armed conflict and war, forced displace-
ment, and severe physical punishment or abuse (Belfer, 2008; Kieling et al., 2011). Youth from
low- and middle-income countries who are exposed to such stressors are likely most in need of
mental health services, yet they represent the most underserved and difficult to reach.

In Kieling et al.’s (2011) review of international intervention studies, they concluded that
child and adolescent mental health services are often not limited to the health sector, and mental
health problems may be best addressed through prevention and early intervention. Therefore,
other institutions (e.g., education, social care, criminal justice) must take part in addressing
mental health issues. Such collaboration across systems has its challenges but has the potential
to successfully create community-based approaches to mental health, especially in low- and
middle-income countries.

The promotion of child and adolescent mental health through building awareness, research,
clinical practice, training, and policy change is a challenge shared across the world. While knowl-
edge of and action toward preventing and treating mental health problems are growing, including
in developing countries, the work is not yet finished.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

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