

North America

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Introduction

Clinical psychology as a discipline and a profession in North America has rapidly evolved in its 125-year history. A discipline that was originally academic has broadened to include both research and clinical work with substantially more psychologists employed as clinicians than researchers. Whereas most of the early clinical functions performed by psychologists were related only to assessment, psychotherapy is now the primary clinical role of psychologists. The dominant theoretical orientation has shifted from psychodynamic to cognitive behavioral. Training has become more regulated and standardized, while evolving to create a variety of models aimed at training clinical psychologists in accordance with their career goals. Efforts have been made to increase the role of research findings in clinical practice. Regulations from state governments and evolving common law have reshaped psychologists' obligations to their patients in regard to confidentiality. Changes in healthcare systems, insurance practices, and government and economic incentives have reshaped clinical practice. Psychologists have expanded beyond the laboratory and traditional clinical practice to take on wider roles in healthcare, education, business, and a broad array of arenas in American and Canadian life. These expanding roles and the wide range of career possibilities makes it a particularly exciting time to be a clinical psychologist.

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History

The broader field of psychology in the United States began primarily as an academic discipline with William James who founded the first psychology laboratory at Harvard University in 1861. Lightner Witmer, was the first psychologist to use the term “clinical psychology,” and to apply his scientific understanding of cognition and behavior with the goal of helping an individual with a specific problem (Benjamin, 2005; Routh, 2011). A professor at the University of Pennsylvania, Witmer was asked to help a grammar school student who had difficulty with spelling. Witmer adapted many of his laboratory procedures to assess the boy and the remediation strategies he devised and applied as a result of the assessment were deemed successful. In 1896, he founded the first psychology clinic, which eventually came to include Ph.D. students in psychology and a social worker on its staff.

Though Witmer’s clinic included both assessment and treatment of school-related difficulties, prior to World War II, clinical psychologists largely applied their research to assessment as opposed to treatment. In the first decade of the 1900s, psychologist Alfred Binet and physician Theodore Simon developed an intelligence test in France that was found to correlate with school performance. American psychologist Henry Goddard, the director of psychological research at the Vineland School in New Jersey, arranged for this test to be translated into English and validated its ability to diagnose intellectual disability in children (Zenderland, 1998). The test became known as the “Stanford Binet” and administration and scoring of psychological tests quickly became the primary activity of clinical psychologists in the United States. During World War I, the army employed psychologists to develop psychological tests to select soldiers for various military occupations and to screen out recruits deemed unfit for military service. This work received favorable publicity and improved the status of the field.

World War II had a major impact on the field of clinical psychology. Psychologists working with the military expanded psychological testing to include advances in cognitive testing and personality testing. It also led to a large-scale expansion of psychologists in the role of treatment provider. Psychiatrists had long opposed having psychologists in this role and many psychologists considered psychoanalysis, the most widely practiced treatment, to lack a scientific basis (Benjamin, 2005). However in the 1940s, aware that large numbers of returning veterans would likely require psychological services and that there were not enough psychiatrists to fill that need, the Veterans Administration (VA) and United States Public Health Service began to direct funds to expand clinically-focused training within clinical psychology. The VA became and remains one of the largest single providers of internship training and employment for clinical psychologists (Zeiss & Karlin, 2011).

Training

As part of this rapid expansion, it became clear that a standard training model for clinical psychology was needed. In 1947 the American Psychological Association (APA) began to set training guidelines, including the requirement that clinical

psychologists be trained as both scientists and professionals and earn a doctoral degree (APA, 1947). With support from the National Institute of Mental Health, representatives from psychology graduate programs came together in 1949 to establish a training model that became known as the Boulder or scientist-practitioner model. This model includes training in core clinical skills, practicum experience during graduate training, a yearlong internship, and research training including a dissertation (Benjamin, 2005) and results in a Doctor of Philosophy (Ph.D.) in Clinical Psychology degree. The Practitioner-Scholar model was formulated at a conference in Vail, Colorado in 1973 in order to prepare graduates for a career in professional practice informed by science, which led to the creation of the Doctor of Psychology (Psy.D.) degree (Peterson, 1976). This model includes the same main components of the Boulder model, but places greater emphasis on preparation for professional practice, including the ability to integrate and apply scientific literature to clinical work.

In practice, Ph.D. and Psy.D. programs fall on a continuum in their emphases on research and clinical training (Norcross & Sayette, 2012), with some Ph.D. programs primarily offering research training, some Psy.D. programs focusing heavily on clinical practice, and many programs of both types offering similar levels of research and clinical training with only slightly different emphases. There has been a substantial increase in the number of students training in clinical psychology and the number of training programs over the last 50 years. Sadly, there has also been a significant proliferation of lesser quality programs, largely for-profit, that offer weaker training in both research and practice.

The clinical science model proposed by Richard McFall in 1991 focuses on training in research and the application of scientific research to practice (Baker, McFall, & Shoham, 2008). A growing number of the programs adhering to this model explicitly discourage applicants who are exclusively interested in clinical practice (Barlow, 2011). The APA accredits programs from all three models, and there are currently 237 accredited clinical psychology doctoral programs in addition to related programs in counseling and school psychology (APA, n.d.a). In 2009, the Psychological Clinical Science Accreditation System began with the goals of accrediting clinical science programs (PCSAS, 2015) and of ensuring tight quality control over these programs. The PCSAS accreditation is intended to ensure that future generations of clinical psychologists contribute to advancing public health by enhancing scientific knowledge in mental health, and uses 50% success in placement of graduates in research careers as a requirement for programs to receive accreditation through this model.

However, an accreditation system that promotes only one model of training creates a risk of division in a field that may be better served by unified efforts to promote high quality clinical psychology research and clinical training, ensure the continued integration of science and practice, inhibit the growth of poor quality programs, secure financial resources to promote research and training, and provide the public with a clear and distinct identity for clinical psychology from other mental health disciplines.

Interestingly, as the PCSAS accreditation system moves away from practice and towards an exclusive focus on research training and careers, the APA's new Standards of Accreditation (SoA) replaces the term "professional psychology" with the term

“Health Service Psychology,” firmly establishing clinical psychology as an applied discipline in line with other health service disciplines (APA, 2015). Also, in contrast to PCSAS’s emphasis on a single model of training, APA’s Council of Accreditation (CoA) no longer recognizes models of training or evaluates programs based on adherence to models of training and distinguishes programs based only on the degrees offered (Ph.D. or Psy.D.). Although the new Standards of Accreditation developed by the Council of Accreditation represent improvements on the earlier Guidelines and Principles for Accreditation (G&P) and have the stated goal of “providing greater clarity to the public and enhanced opportunities for innovation in health service psychology education and training,” these and other recent improvements may be too late to stem the tide against the move to an alternative accreditation system.

One major challenge currently facing clinical psychology training in the United States is the imbalance between the number of available internships and the number of graduate students seeking them. Students are required to complete the equivalent of a yearlong full time internship to get their doctoral degrees. These internships are obtained through a national matching process sponsored by the Association of Psychology Postdoctoral and Internship Centers (APPIC). In 2015 only 83.8% of students in American clinical programs seeking an internship were matched through the APPIC system, leaving 368 students to seek internships outside the system or seek to improve their qualifications and reapply the following year (APPIC, 2015). Typically, a significantly larger percentage of students enrolled in freestanding, for-profit schools offering a Psy.D. degree fail to obtain internships through the APPIC match than students in Psy.D. or Ph.D. programs affiliated with universities (Norcross, Ellis, & Sayette, 2010), and this percentage is even larger for non-APA accredited programs (Anderson, 2009). Individual graduate programs also have widely varying internship match rates, and 15 programs (14 of them APA accredited), generate a disproportionate percentage of unmatched applicants, have higher admissions acceptance rates, and grant degrees to students who obtain lower scores on the Examination for the Professional Practice of Psychology (EPPP; Norcross, Castle, Sayette, & Mayne, 2004; Peterson, 2003; Ross, Holzman, Handal, & Gilner, 1991; Yu et al., 1997), leading for calls by some to focus reform efforts on these programs (Parent & Williamson, 2010). Proposals to improve the match rate have also been made at a broader systemic level and include increased support for developing and accrediting new internships, advocating for increased government funding for psychology training, and limiting the APICC match to students in APA accredited training programs (Anderson, 2009; CCTC, 2012). Recent efforts by the APA and other funding agencies (e.g., Health Resources and Services Administration) have led to a decline in the internship imbalance, although more efforts are needed to fully address the problem.

Clinical psychology as a field developed more slowly in Canada than the United States. Prior to World War II, there were fewer than 100 clinical psychologists in Canada and they were primarily academics (Conway, 1984). Professional training was slower to expand following the war than it was in the United States and was largely at the master’s level. Clinical psychology programs in English-speaking Canada were more likely to adopt the scientist-practitioner model with a heavy emphasis on scientific research and the awarding of doctoral degrees, whereas programs in French-speaking Canada were more practice oriented, had larger

enrollments than programs in the rest of Canada, and were more likely to award masters degrees (Conway, 1984). Many Canadian doctoral programs sought and received accreditation from the APA (MacKay & Dobson, 2009). Founded in 1938, the Canadian Psychological Association was not formally organized until 1939. Clinical training standards in general were slower to develop in Canada, in part because of its scientific focus, with the Canadian Psychological Association (CPA) not adopting accreditation criteria for doctoral training until 1984. For many years Canadian programs maintained both APA and CPA accreditation. As of 2015 the APA no longer accredits programs in Canada, but the APA and CPA recognize each other's accreditation as equivalent (APA & CPA, 2012).

Regulation

In 1947, Connecticut became the first state to regulate the practice of psychology with the implementation of requirements for licensure. Since then, each state has developed its own licensing requirements, and today only psychologists who have completed state licensing requirements can practice independently. Most states require the completion of 1–2 years of postdoctoral training before psychologists can take the written Examination for Professional Practice in Psychology (EPPP), the exam used by all states. Some states require an additional oral exam or essay. Once licensed, some states require psychologists to obtain a certain number of continuing education credits before their license can be renewed. Because licenses are issued at the state level, psychologists are not automatically qualified to practice if they move across state lines.

Canada also has provincial and territorial as opposed to federal level licensing of psychologists. Unlike the United States, it has a long history of individuals with Masters degrees practicing with the title of “psychologist.” In the past 30 years, some provinces have shifted from requiring a master’s to a doctoral degree, and others have created the title of “psychological associate” for those with master’s degrees (Hunsley, Ronson, & Cohen, 2013). Many provinces and territories also require the EPPP. Canadian psychologists now have greater mobility between jurisdictions than American psychologists. Canada’s 1994 *Agreement on Internal Trade* (AIT), which aimed to increase mobility of goods and workers in Canada, provided the impetus for the CPA and other professional psychology organizations to develop the *Mutual Recognition Agreement* (MRA; Gauthier, 2002). Signed by psychology regulatory bodies in 2001, it requires core competencies for those providing psychological services, regardless of their jurisdiction or title, and allows most psychologists who are licensed or registered in one jurisdiction to practice in another without further education or evaluation.

Professional Roles and Settings

Clinical psychologists serve in a wide range of professional roles and most psychologists in the United States perform more than one role. Psychotherapy is the

predominant activity: a 2010 survey of members of the Society of Clinical Psychology, APA Division 12, found that 76% reported conducting psychotherapy for an average of 35% of their professional time (Norcross & Karpiak, 2012). Of those who reported practicing psychotherapy, almost all reported practicing individual therapy, about half reported practicing couples therapy, but significantly fewer indicated practicing family or group therapy. The same survey found that 58% of Division 12 psychologists reported being routinely involved in assessment or diagnosis. Formal psychological assessment remains a distinctive aspect of clinical psychology: while many allied mental health professions conduct psychotherapy, only psychologists are qualified to conduct formal assessment. In addition, about half of the psychologists surveyed reported involvement in teaching, supervision, research/writing, or administration (Norcross & Karpiak, 2012). Many psychologists also serve as consultants in a variety of forms including providing guidance to colleagues or other health professionals on their patients, advising organizations on ways to manage interpersonal and organizational conflicts, and serving as coaches to executives with the goal of helping them become better leaders. Though psychologists serve in a wide range of roles, most graduate programs only directly train students in research and clinical practice. Skills needed for consulting, administrative, and supervisory roles tend to be learned in the process of serving in those roles. Most psychologists serve in more than one of the above mentioned roles, though overall participation in a broad range of roles has declined, likely indicating an increase in specialization with more time spent engaged in fewer roles (Norcross & Karpiak, 2012).

Clinical psychologists also work in a wide range of settings. In the United States, 41% of psychologists reported being primarily employed in private practice in the 2010 APA Division 12 survey, an increase of more than 100% since 1960 (Norcross & Karpiak, 2012). Of those not employed full-time in private practice, 50% reported private practice work on a part-time basis. Other clinical employment settings for psychologists include both psychiatric and general hospitals, outpatient clinics, and the VA health system. Clinical psychologists in these settings frequently collaborate with allied health professionals such as psychiatrists, social workers, nurses, and medical doctors focused on physical health. In addition many psychologists are employed in university academic departments (both psychology and other disciplines) and medical schools. Some of these psychologists do not engage in clinical work and some do not even seek licensure. The 2010 APA Division 12 survey found that 60% of respondents identified primarily as clinical practitioners, 18% as academicians, 10% as researchers, and 6% as administrators (Norcross & Karpiak, 2012). There appears to be a trend towards clinical psychologists being employed in single positions: a similar survey in 1960 found that fewer than one-third reported being employed in a single position whereas in 2010, 50% reported being employed in a single position and only 8% reported engaging in three or more positions (Norcross & Karpiak, 2012). In addition, clinical psychologists under fifty were much less likely to report being primarily employed in private practice in the 2010 survey (Norcross & Karpiak, 2012); this may reflect a general trend away from private practice or varying employment choices at different stages of psychologists' careers. This survey found a higher average age of Division 12 members than previous surveys, which may be

reflective of younger psychologists being less likely to join Division 12. It should be noted that though this survey provides useful information on the distribution of psychologist employment and other areas of interest, the data may not be an accurate reflection of the overall population of clinical psychologists in the United States, as many are not members of Division 12.

In a 2009 Canadian survey designed to be representative of psychologists across the nation, 77% of psychologists reported being engaged in some private practice, with 36% reporting being engaged primarily or exclusively in private practice (Hunsley et al., 2013). Practitioners in the public sector were more likely to teach or be engaged in research than those in the private sector. Doctoral level clinicians were more likely to spend more time on assessment and be more involved in consulting roles than master's level clinicians who devoted a larger share of their time to intervention. It should be noted that this survey included clinical, counseling, school and neuropsychologists.

Theoretical Orientation

Predominant theoretical orientations have shifted over the last 50 years. In the 2010 Division 12 survey as in surveys in years past, respondents were given a list and asked to choose their primary and secondary theoretical orientation (Norcross & Karpiak, 2012). In 2010, the most popular choice was cognitive (31%), followed by eclecticism/integration (22%), psychodynamic (18%) and behavioral (15%) and smaller percentages for interpersonal, Rogerian, systems, and constructivist. This study may underrepresent the use of cognitive theory and techniques: Norcross, Karpiak and Lister (2005) surveyed those who identified as integrationist or eclectic in a 2003 Division 12 survey and found that cognitive therapy was the largest contributor to these clinicians' practice. This reflects a trend of overall increasing identification with a cognitive behavioral orientation and declining psychodynamic identification since 1960. This trend is also reflected in the demographics of those surveyed: those ages 65 and below were significantly more likely to endorse a cognitive behavioral orientation and less likely to endorse a psychodynamic orientation than those above the age of 65. The trend is starker in Canada: in the 2009 survey, which allowed for the selection of more than one theoretical orientation, 80% selected cognitive-behavioral, 31% humanistic/experiential, 26% psychodynamic, 23% interpersonal, and 21% family systems (Hunsley et al., 2013). Both these studies only assessed self-identified theoretical orientation; many psychologists may practice in a manner that strict adherents of an orientation would not consider to be congruent with that orientation (Waller, Stringer, & Meyer, 2012). A survey of practicing APA members (including counseling and school psychologists) found that most of them endorsed using techniques outside their direct theoretical orientation (Thoma & Cecero, 2009) and a study of master-clinicians found only small differences between clinicians of different theoretical orientations in clinician-identified clinically significant portions of sessions (Goldfried, Raue, & Castonguay, 1998). Though there is likely a strong trend toward an increase in the use of cognitive behavior theory and techniques over the past 50 years, the picture of how clinicians actually practice is more complicated.

Integrating Research and Practice

A major development in the landscape of clinical training and practice is the concept of evidence-based practice (EBP), defined as integrating the best available research with clinical expertise and patient values (American Psychological Association, Presidential Task Force on Evidence-Based Practice, 2006). Based on initial efforts in the field of medicine (Evidence-Based Medicine Working Group, 1992; Sackett, 1969; Sackett, Haynes, & Tugwell, 1985; Sackett, Haynes, Guyatt, & Tugwell, 1991) and later within Clinical Psychology (Chambless et al., 1996, 1998), this model was officially endorsed by the APA in 2005 (American Psychological Association, Presidential Task Force on Evidence-Based Practice, 2006). In addition, the VA, Medicare, Medicaid, and private insurance companies have begun to take EBP into account in policy deliberations and reimbursement decisions (Spring, 2007).

To the extent to which EBP is controversial, much of the debate appears to be centered over how the three aspects are balanced, with researchers generally advocating a heavier reliance on research evidence than clinical expertise. Though surveys have shown general positive attitudes toward EBP among clinicians (Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2013), many clinicians report relying on clinical expertise over empirically supported treatment literature in making clinical decisions (Safran, Abreu, Ogilvie, & DeMaria, 2011; Stewart & Chambless, 2007). The gap between psychotherapy research and practice is also evident in clinical training: a 2006 survey found that 44% of Ph.D. and 67% of Psy.D. programs in clinical psychology did not offer both clinical supervision and didactic training in evidence-based treatments (Weissman et al., 2006). Using principles of evidence-based training in medicine, Beck and colleagues have proposed a model for improving clinical training in EBP that formally integrates experiential and didactic teaching/supervisory methods to teach students the requisite skills to base clinical practice on research, use critical thinking, and engage in lifelong learning (see Beck et al., 2014 for a complete review).

Ethics and Legal Issues

Communications between patients and their psychotherapists are considered privileged in the United States. Usually, the psychotherapist is only permitted to release information to a third party with written permission from the patient. What information can and must be disclosed without permission varies from jurisdiction to jurisdiction. Common circumstances in which the therapist is mandated to break confidentiality include the patient being likely to harm himself, threats made against specific individuals, and ongoing child abuse. In 2013, following the deaths of 28 individuals in the Sandy Hook Elementary School shooting committed by a lone gunman with a history of mental illness, New York expanded mandated reporting requirements with the Secure Ammunition and Firearms Enforcement (SAFE) Act.

This legislation requires that certain mental health professionals including clinical psychologists provide identifying (but not clinical) information to county mental health officials if they believe it is likely that one of their patients will harm themselves or someone else (Eells, 2013). This information will then be used to determine if the patient should be prevented from purchasing firearms or if the patient has a firearm that should be removed. These mental health professionals are protected from criminal and civil liability for choosing to report or not report, which may serve to limit the impact of the provision. Though this legislation has the potential to remove weapons from those who might harm themselves or others, it infringes on mental health professionals' primary duty to care for their patients and provides reason for increased reluctance among patients to report suicidal or homicidal ideation.

Both the APA and CPA have ethics codes to which they expect their members to adhere, in addition to abiding by the legal requirements in their jurisdictions. In the United States and Canada ethics complaints can be handled by bringing the complaint to the APA/CPA (though the CPA rarely receives complaints), licensing boards, or through private lawsuits. Pope (2011) found that dual relationships with patients (sexual or non-sexual), unethical, unprofessional or negligent practice, criminal conviction, and improper record keeping are the most common reasons that licensing boards in the United States take disciplinary action. The reasons are similar in Canada, though breach of confidentiality is more common than criminal conviction. Professional liability suits appear to be more common in the United States than Canada, and in a 10-year period the largest percentage of claims were paid out for ineffective treatment or failure to appropriately consult or refer, improper diagnosis or failure to diagnose, child custody disputes, and sexual misconduct (Pope, 2011). All clinical psychologists in the United States are required to carry malpractice insurance. In the United States, there is a large emphasis on the legal aspects of maintaining confidentiality and other ethical concerns, sometimes to the point of focusing on protecting the psychologist as opposed to the patient (Fisher, 2008).

Future Directions

The field of clinical psychology continues to rapidly change. Demographically, the proportion of female clinical psychologists is rapidly increasing, and will continue to do so based on the demographics of students currently enrolled in doctoral programs (Hunsley et al., 2013; Norcross & Karpiak, 2012). In addition, ethnic minorities make up a larger portion of clinical psychologists than in the past 50 years, but this increase still lags behind the proportions of ethnic minority populations in the United States and Canada, and has fallen short of the APA's goal to increase ethnic minority representation in the field (Grus, 2011; Hunsley et al., 2013; Norcross & Karpiak, 2012). The continued feminization of the profession will require the field to both anticipate and accommodate the special needs of women in order to maintain them within the workforce while enhancing efforts to increase the enrollment of men and ethnic minorities into clinical psychology graduate programs.

A significant number of challenges lay head and in many ways the field of clinical psychology is at a crossroads. Dissatisfaction with APA's accreditation system served as an impetus for the development of the alternative PCSAS accreditation system intended to better facilitate the advancement of science. However, this new accreditation system inadvertently creates a needless wedge between science and practice, and as a result, among high quality scientist-practitioner programs that value the integration of both. Without a reasoned dialogue and unity between both sides to approach problems facing our field, the fissure between science and practice may widen over time and further weaken the field. Similar to the division between bench research (Ph.D.) and clinical practice (M.D.) in the biological sciences, the field of clinical psychology may also separate and develop two distinct identities over time, one focused on basic research and the other on clinical practice.

The unity of the field is now a more pressing goal than ever. The identity of the profession faces considerable pressure from other professions and from developments in the field. The Research Domain Criteria (RDoC) released by the National Institute of Mental Health (NIMH) in 2008 may be one such example. This new classification framework for research on mental disorders is intended to integrate many levels of information to better understand basic dimensions of functioning underlying the full range of normal and abnormal human behavior. Thus, the RDoC project has the potential to dramatically increase our understanding of mental disorders and their treatments and offer opportunities for greater integration between disciplines for the betterment of mental health. However, the RDoC places a far greater value on the contributions of genomics and neuroscience over behavioral science, a value that is reflected both in the philosophy and funding decisions of the NIMH. The dearth of funding for pure behavioral science research has led many behavioral scientists to be excluded from funding opportunities. Others have coped by incorporating genomics and neuroscience into their own research program, which could potentially diminish and devalue the scientific contributions of behavioral research over time.

There are many changes afoot on the clinical front as well. Changes in insurance coverage for psychological services have historically had and will continue to have major impacts on the practice of clinical psychology in both the United States and Canada. Initially, clinical psychologists in the United States could not be reimbursed for their services by medical insurance companies because they lacked medical degrees. Lobbying efforts by psychologists in the 1970s prompted state legislatures to pass "freedom-of-choice" laws allowing anyone licensed to practice mental healthcare to be reimbursed; clinical psychologists can now be reimbursed for psychological services in all 50 states. For 10–20 years, psychologists could treat their patients as they saw fit and expected to be at least partially reimbursed by the patient's medical insurance if it included mental health coverage, with the patient paying the remainder of the fee. This model began to falter in the 1980s with the development and spread of managed health care, some form of which covered half of Americans as of 2006 (Cantor & Fuentes, 2008). Managed healthcare has interfered with therapists' practice by limiting the number of sessions patients can receive, reviewing therapy notes and treatment plans to authorize the

continuation of care (utilization review), requiring primary care doctors to authorize referrals to psychologists, reducing inpatient stays, and limiting reimbursement rates, among other tactics designed to minimize costs to the insurers. Many therapists consider working with managed care companies the most stressful aspect of their job (Rupert & Baird, 2004). Some therapists have responded by offering briefer models of psychotherapy, while others have opted out of the managed care system and do not directly work with any third party insurers. Therapists who have opted out of working with third party insurers are more likely to have more experience, creating inequities in access to quality mental healthcare (La Roche & Turner, 2002).

Large-scale changes in coverage and potentially of access to mental health care in the United States are underway through a combination of the 2008 Mental Health Parity and Addiction Equity Act (MHPAEA) and the 2010 Patient Protection and Affordable Care Act (PPACA; Beck et al., 2014). Mental health parity is the requirement that health insurance policies do not impose quantitative (e.g. session limits, total spending limits) or qualitative (e.g. size and scope of provider network, utilization reviews) limits on mental healthcare coverage beyond those imposed on medical/surgical coverage. The Affordable Care Act is aimed at reducing disparities, increasing prevention and wellness initiatives, and is intended to promote health care efficiency by measurement and tracking of healthcare outcomes. The combination of MHPAEA and the ACA is expected to extend coverage for mental health and substance use disorder treatment to 30 million Americans who previously lacked this coverage, enhance behavioral health coverage for an additional 30 million individuals who already had some form of coverage, and make providers more efficient and accountable for healthcare outcomes (Beck et al., 2014; Beronio, Glied, & Frank, 2014).

Many of the coverage-expanding provisions in the ACA took effect in 2014 and it remains to be seen how these changes will impact access and utilization of services. An APA survey conducted in March 2014 found that substantial portions of Americans said that their health insurance had different limits or copayments for behavioral healthcare (mental health and substance use care) and slightly less than half of those surveyed stated that their current health insurance covered visits to a psychologist (APA, 2014). Some of these results may be attributed to a genuine lack of coverage because even though the ACA requires most health insurance plans to cover behavioral healthcare, some workplaces and some grandfathered plans are not required to provide such coverage. However, a larger share of these responses is likely accounted for by healthcare consumers' lack of knowledge of their rights and the terms of their plans. Hopefully more Americans will become more aware of their coverage and rights as the time since implementation of the ACA increases.

Even with full implementation of the ACA, there will be Americans who do not functionally have access to the behavioral healthcare they need. Much of the expanded coverage is in the form of insurance plans with high deductibles, and some workplaces are transitioning to such plans, impacting those who have maintained insurance coverage prior to the ACA. (Saper, 2015; Wharam, Ross-Degnan,

& Rosenthal, 2013). High deductibles serve as a barrier to using healthcare for Americans with limited financial resources because they require paying for large portions of their medical services until the deductible is met for the year. There will continue to be a need for states to maintain public mental health systems to provide services not or only partially covered by traditional health insurance. These services are particularly critical for the care of severely and persistently mentally ill individuals and those experiencing first episode psychosis. They include supportive housing, employment and education, family psychoeducation, long-term institutional care, Assertive Community Treatment, and therapeutic foster care (Goldman & Karakus, 2014; Kane et al., 2015). Public mental health systems will also continue to be necessary to serve those not covered by the ACA such as undocumented immigrants, those who elect not to take insurance coverage, and individuals with insurance coverage that cannot afford to use their insurance due to high deductibles (Goldman & Karakus, 2014; Wharam et al., 2013).

The role of psychologists in the broader American healthcare system is also evolving. Though there will likely to continue to be clinical psychologists working in private practice for the foreseeable future, more psychologists provide services in settings that integrate medical and behavioral health in primary care and community health centers that offer services to underserved communities. Twenty to twenty-five percent of patients presenting in a primary care setting have a comorbid psychiatric condition (Spitzer, Kroenke, & Williams, 1999); these conditions have a major impact on patient physical health and their use of medical services, and are worthy of treatment in their own right (Simon, VonKorff, & Barlow, 1995). Psychologists in these settings provide traditional services and leverage their skills in psychological assessment to serve as consultants to medical doctors, nurses, social workers, and other members of the healthcare team. In addition to targeting DSM disorders, psychologists, especially those specializing in the growing field of health psychology, provide behavioral interventions targeting diet, medication compliance, and substance use. The ACA provides incentives for the creation of integrated healthcare centers and the organization of health homes to manage and coordinate the care of severely mentally ill patients and those with multiple chronic physical conditions (Katon & Unutzer, 2013; Mechanic, 2012). Integrated care has the potential to enhance physical and mental healthcare outcomes for a wide range of patients, and expand the role of psychologists in the broader medical system.

Another fairly new role for clinical psychologists is the prescription of psychotropic medication. Psychologists currently have prescription privileges in New Mexico, Louisiana, Illinois, and Iowa (APA, 2016; APA, n.d.b). These states require licensed psychologists seeking prescription privileges to complete substantial postdoctoral coursework and supervised training in clinical psychopharmacology. Arguments made by those in favor of prescription privileges include the fact that most psychotropic medications are prescribed by primary care doctors who have little specialized training in mental health (DeLeon & Wiggins, 1996) and that psychologists can provide comprehensive mental health services to meet public health needs. The APA and state psychological organizations in the United States and provincial psychological associations in Canada are currently supporting lobbying efforts for

state and provincial legislatures to grant psychologists prescription privileges. However, psychologist prescription privileges is a highly controversial topic not only among psychiatrists, many of whom object to psychology's perceived infringement on their scope of service, but among psychologists themselves. Arguments from psychologists against prescription privileges include the threat that it poses to psychologists' professional identity by devaluing behavioral practice, concerns that psychologists will favor prescription of medication over implementation of behavioral strategies over time given its ease of application, concerns over patient safety, and increased malpractice insurance premiums (Hayes & Heiby, 1996; Lorion, 1996).

Government policy and economic forces have also impacted the provision of mental healthcare in Canada. The provision of medical services in Canada differs broadly from the United States in part because of Canada's publicly-funded healthcare system. At its inception, the Canadian public health insurance system only covered hospitalization for physical ailments, omitting coverage for mental illness (Romanow & Marchildon, 2003). Though coverage is now provided for treatment of mental illness, the services provided by psychologists are only covered in the public sector, not in private practice (CPA, n.d.a). In contrast, this insurance covers psychiatrists in both the public and private sector. However, many Canadians have supplemental health insurance through their workplace and these policies sometimes cover private psychological services. Hunsley et al. (2013) found that nearly half of patient services were paid for by a publically funded institution, and nearly a third were paid for directly by patients, of which 23% were reimbursed by private insurance and 11% were paid without any insurance reimbursement. Generally clinicians in the public sector are more likely to treat psychotic illness, while those in the private sector are more likely to provide assistance with life stressors, trauma, managing health, and vocational problems; anxiety disorders, depressive disorders, and interpersonal difficulties are commonly treated in both settings (Hunsley et al., 2013). Overall, mental health treatment in Canada is more likely to include medication than not (Romanow & Marchildon, 2003), leaving many Canadians who would benefit from psychotherapy without services. Canadian provincial psychological associations are actively advocating for an expanded role for psychologists in the Canadian healthcare system (CPA, n.d.b).

Summary

Clinical psychology has evolved and expanded from being solely an academic discipline, to including clinical work in the form of psychological assessment, to being dominated by psychotherapy. Throughout these changes, the commitment to research for the purpose of better understanding the human mind has continued. There are now two options for doctoral degrees: the more research oriented Ph.D. and the Psy.D., which is more practice focused but maintains an emphasis on the value of utilizing research. Training and clinical practice are increasingly focused on

integrating the research and practice elements of the discipline into patient care. However, current changes, such as the new PCSAS accreditation system, prescription privileges, and the RDoC project's greater emphasis on the contributions of genomics and neuroscience pose a potential risk to the continued integration of science and practice, and a risk to the continuation of behavioral science research and practice.

Licensure in psychology is regulated at the state and province/territory level. Every U.S. state requires a doctoral degree for the title of psychologist, whereas some Canadian provinces/territories allow for practice with a master's degree. Psychologists have a multitude of roles within and outside of the healthcare system including those of assessor, treatment provider, researcher, teacher, consultant, and administrator. Psychologists also work in a wide range of settings such as hospitals, clinics, private offices, schools, social service organizations, and academic departments. When working in clinical settings, psychologists are generally obligated to keep their communications with their patients confidential, though both legislation and action by courts have expanded the range of situations in which psychologists are mandated to break confidentiality. In New York, this includes situations in which an individual who may harm himself or someone else owns a firearm. There are a number of avenues for individuals to file ethics complaints against psychologists: some of the most common violations resulting in complaints and lawsuits are dual relationships, negligent or unprofessional practice, and improper record keeping.

The field of clinical psychology is highly influenced by broader healthcare policy and the practices of insurance companies. It remains uncertain how the Affordable Care Act (and its possible repeal and replacement) and other changes to the broader healthcare system will impact clinical practice and the role of psychologists in American life, though if the ACA functions as intended, it should increase access to behavioral health services and expand integrated medical and psychological care. It is also uncertain how the practice of clinical psychology will change in Canada, where the current health insurance system limits psychologists' roles.

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