The Evolution of Clinical Psychology

Introduction

Mental health is a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

World Health Organization (2007)

- More than 450 million people have mental disorders. Many more have mental health problems.
- About half of all mental disorders begin before people reach age 14.
- Worldwide, 877,000 people commit suicide every year.
- In emergencies, the number of people who have mental disorders is estimated to increase by 6–11%.
- Mental disorders increase the risk for physical disorders.
- Many health conditions increase the risk of mental disorders.
- Stigma prevents many people from seeking mental health care.
- There are great inequities in the availability of mental health professionals around the world.

Adapted from World Health Organization (2007)

In the 21st century, the potential for clinical psychology to make important contributions to the health of individuals, families, and society is abundantly clear. In this opening chapter, we introduce you to the profession of clinical psychology, its scope, and its remarkable history. Throughout this text, we will illustrate with compelling evidence that clinical psychologists have developed assessments that are helpful in understanding problems and interventions that are effective in preventing, treating, and even eliminating a broad range of health problems and disorders.

To fully appreciate the importance of such health services, it is necessary to understand the scope of the public health problem facing health care systems in North America and other parts of the world. A national survey of the mental health and well-being of Canadians aged 15 years and older found that one in three Canadians met criteria for a mental disorder at some point in their lives (Pearson, Janz, & Ali, 2013).

Furthermore, 1 out of every 10 Canadian adolescents and adults reported that in the last year they experienced symptoms consistent with a diagnosis of a mental disorder such as abuse or dependence on alcohol, cannabis, or other drugs; a mood disorder (i.e., a major depressive episode or bipolar disorder); or generalized anxiety disorder. It is estimated that the cost of mental illness to Canadian society—including absenteeism, underemployment, unemployment, disability costs, health care services and supports, and premature death—may be as high as $63 billion annually (Wilkerson, 2012).

Perhaps due to the stressfulness of living and/or working conditions, the rate of mental health problems is even higher among certain groups than in the general population. For example, a health survey of members of active Canadian military personnel found that 16.5% reported a mental disorder in the previous year (Pearson, Zamorski, & Janz, 2014). Being deployed to combat operations was associated with increased risk of disorder.

The Depression Report, released in 2006 by the London School of Economics, translated epidemiological data into economic terms (London School of Economics Centre for Economic Performance's Mental Health Policy Group, 2006). Despite the estimate that one family in three is affected by depression or anxiety, only 2% of the expenditures of the National Health Service (NHS) in the United Kingdom (UK) were allocated to the treatment of these disorders. Lost output due to depression and anxiety was estimated to cost the UK economy £12 billion a year—representing 1% of the total national income. A million people in the UK were receiving disability benefits because of mental disorders, at a cost of £750 a month (about $1,500 Canadian) per person.

The UK National Institute for Health and Care Excellence (NICE) is an independent interdisciplinary organization with the mandate to provide national guidance on promoting good health and preventing and treating ill health. Systematic literature reviews by NICE concluded that evidence-based psychological therapies, which cost approximately £750 per person, are effective for at least half the people with anxiety and depression and are at least as effective as medication in tackling these mental health problems. The UK government therefore decided to improve access to psychological therapies by training mental health professionals, including, but not limited to, psychologists. Policy-makers predicted that this investment would offer enormous potential human benefits in reduced suffering and increased well-being and would yield significant economic benefits in terms of both reduced claims for disability and increased productivity. Consistent with these expectations, in 2012–2013 the Improved Access to Psychological Therapies program greatly increased the number of referrals made for psychological therapies, with almost two-thirds of people receiving their first appointment within a month of referral (Kmietowicz, 2014). Of those offered services, half entered treatment, and 57% of those entering treatment showed improved mental health at the end of treatment (Wise, 2014).

Data from the World Health Organization (presented in Exhibit 1.1) illustrate the scope of mental health problems across countries. Worldwide, hundreds of millions of people suffer from mental disorders. However, most mental disorders are overlooked or misdiagnosed, and only a small percentage of those individuals who suffer from a mental disorder ever receive treatment. Even if they do receive treatment for other health concerns, in most cases—regardless of the wealth or level of development of the country in which these people live—mental health problems are neglected. Approximately 8 million deaths worldwide annually are attributed to mental disorders (Walker, McGee, & Druss, 2015). This is especially troubling because effective, relatively inexpensive treatments (psychological and/or pharmacological) exist for most of these conditions. Viewpoint Box 1.1 describes the initiatives undertaken by the Mental Health Commission of Canada to enhance the health and well-being of Canadians.

Are mental health problems as serious as physical health problems?

In addition to the pressing problems posed by mental disorders, there is mounting evidence that lifestyle and psychosocial factors are related to many of the causes of disability and death in Western countries. As you will learn in Chapters 10 and 15, there is evidence that psychological services can dramatically reduce the negative health impact of these lifestyle and psychosocial risk factors. The major contributors to disability are poor diet, tobacco smoking, high body mass index, high blood pressure, high fasting plasma glucose levels, and low physical activity (US Burden of Disease Collaborators, 2013). A large-scale study of the causes of mortality in the United States reached startling conclusions (Mokdad, Marks, Stroup, & Gerberding, 2004).

> ### EXHIBIT 1.1 | World Health Organization Mental Health: The Bare Facts
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> - At any given time, there are 450 million people worldwide suffering from mental, neurological, and behavioural problems.
> - It is predicted that the number of people suffering from these problems will increase in the future.
> - Mental health problems are found in all countries.
> - Mental health problems cause suffering, social exclusion, disability, and poor quality of life.
> - Mental health problems increase mortality.
> - Mental health problems have staggering economic costs.
> - One in every four people seeking other health services has a diagnosable mental, neurological, or behavioural problem that is unlikely to be diagnosed or treated.
>
> - Mental health problems are associated with poor compliance with medical regimens for other disorders.
> - Cost-effective treatments exist for most disorders and, if applied properly, could enable people to function better in their communities.
> - There is greater stigma associated with mental health problems than with physical health problems.
> - Most countries do not allocate sufficient funds to address mental, neurological, and behavioural problems.
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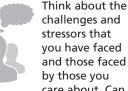> Adapted from World Health Organization (2004b).

Although dramatic causes such as motor vehicle accidents accounted for 2% of deaths, and shooting fatalities accounted for 1% of deaths, the leading causes of death were related to tobacco smoking (18.1%), poor diet and physical inactivity (16.6%), and alcohol consumption (3.5%). Adding the numbers together, these data demonstrate that at least 40% of fatalities were attributable to entirely preventable—or treatable—factors.

Defining the Nature and Scope of Clinical Psychology

As we consider the pain and suffering experienced by people with mental and physical health problems, the interpersonal effects of their distress on their family, friends, and co-workers, and the tragedy of untimely death, the need for effective services to identify and address these problems is evident. It is inevitable that, at many points in our lives, each of us will be affected, either directly or indirectly, by the emotional distress of psychological disorders. The first experience may be helping a friend through confusion and anger stemming from a loved one's suicide. As a university student, you may be faced with the challenges of helping a roommate with an eating disorder who binges and purges. Young parents may provide support to another young parent who is desperate to find appropriate services for a child with autism spectrum disorder. In mid-life, you may be faced with the burden of caring for an elderly parent suffering from dementia, or you may be attempting to support a partner who is chronically anxious and avoids social gatherings. As you age, you may face the death of your partner and friends and may have to cope with your own increasing infirmity and pain. Clinical psychology is the branch of psychology that focuses on developing assessment strategies and interventions to deal with these painful experiences that touch everyone's life.

Throughout the text, to give you a clear sense of who clinical psychologists are and the variety of things they do in their work, we introduce you to a number of Canadian clinical psychologists. In our first example in the text, Profile Box 1.1, you will meet psychologist Dr. David Dozois from Western University, who is a champion of evidence-based psychological practice.

Let's consider some definitions of clinical psychology. Exhibit 1.2 provides examples of definitions and descriptions of clinical psychology from the United States, Britain, and New Zealand. Despite some differences in emphasis, a common theme running through these definitions is that clinical psychology is based firmly on scientifically supported psychological theories and principles. Furthermore, the development of effective assessment, prevention,

Think about the challenges and stressors that you have faced and those faced by those you care about. Can you identify the things that made your distress worse? On the other hand, what helped you in dealing with difficulties?

Viewpoint Box 1.1   Mental Health Commission of Canada

MHCC | CSMC

In Canada, although health services are provided by the provinces, federal initiatives have underlined the need for a national strategy with respect to mental health. *Out of the Shadows at Last*, published in 2006, reported on the Senate Commission on Mental Health, chaired by Senator Michael Kirby. Testimony from people with mental disorders, their families, service providers, and researchers drew attention to the urgent need for increased government investment to address the needs of the high numbers of Canadians suffering from a mental disorder. The incomplete and patchwork nature of mental health services available across the country was emphasized in the report. Following one of the key recommendations of the report, the federal government established the Mental Health Commission of Canada (MHCC).

The MHCC is a national non-profit organization designed to enhance the health and well-being of those living with a mental disorder by focusing national attention on mental health issues. The MHCC is designed to foster collaboration among different levels of government, service providers, researchers, people with mental disorders, and the families of those individuals. The MHCC has two clear messages about people living with a mental disorder:

- They have the right to receive the services and supports they need.
- They have the right to be treated with the same dignity and respect as those struggling to recover from any kind of illness.

The MHCC currently has six initiatives and projects:

1. *Opening Minds*: a campaign to reduce the stigma associated with mental disorders and to eradicate discrimination faced by those living with mental health problems
2. *Mental Health First Aid*: a program for training members of the public to assist a person developing a mental health problem or experiencing a mental health crisis
3. *Mental Health Strategy for Canada*: an initiative for developing a national mental health strategy (over two-thirds of countries already have one; Canada lags behind the rest of the world in this regard)
4. *Knowledge Exchange Centre*: an initiative designed to make evidence-based information about mental health widely available to both service providers and the public
5. *Housing First*: a program for providing people with housing and support services tailored to meet their needs
6. *Peer Project*: a project designed to enhance the use of peer support by creating and applying national guidelines of practice

Profile Box 1.1   Dr. David J. A. Dozois

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I received my Ph.D. in clinical psychology from the University of Calgary in 1999. I am a professor of psychology and director of the Clinical Psychology Graduate Program at Western University. I am registered as a psychologist in the Province of Ontario and certified with the Academy of Cognitive Therapy (ACT) and the Canadian Association of Cognitive and Behavioural Therapies (CACBT). I am also a former Beck Institute Scholar at the Beck Institute for Cognitive Therapy and Research. Over the course of my career, I have been involved administratively in a number of professional organizations, most notably serving as President of the Canadian Psychological Association (2011–2012). I am currently on the Board of Directors of the Canadian Psychological Association, the Ontario Mental Health Foundation, and the International Association of Applied Psychology. In addition to my research and teaching, I also maintain a clinical practice.

My research concentrates on cognitive mechanisms related to depression, with particular interest on content and organization of the self-schema. I am also interested in cognitive-behavioural theories and therapy. My research has resulted in 147 scientific papers, book chapters, and books. Inspired by the hit television series *Breaking Bad*, I recently suggested to my graduate students that we unofficially name our lab *Breaking Sad*—after all, that is what we are trying to do by studying the onset, maintenance, amelioration, relapse, and recurrence of depression.

How Did You Choose to Become a Clinical Psychologist?

I always knew that I wanted to be in a helping profession, and I really enjoyed my psychology classes when I was an undergraduate student. When I entered graduate school, I was initially determined to be a clinician, but I became more and more passionate about research as time went on. Although I love clinical practice (and continue to do it), I believe that in my position as a university professor, I have the potential to make a broader contribution.

What Is the Most Rewarding Part of Your Job as a Clinical Psychologist?

What I find most gratifying about being a clinical psychologist is that there is considerable diversity in this career. A clinical psychologist wears a number of different "hats" (e.g., teacher, researcher,

supervisor, clinician, consultant), and I find this stimulating. I count it a tremendous privilege to train future clinicians and researchers and to be involved in their career development. The opportunity to produce research that will change our understanding of depression, and improve its treatment, is also very rewarding.

What Is the Greatest Challenge Facing You as a Clinical Psychologist?

Perhaps the greatest challenge that I face is finding (or mustering) the time to engage in all the exciting things that I would like to be involved with. There are a lot of pressures on your time in this career. Aside from teaching graduate and undergraduate courses and writing research articles and book chapters, a professor's duties also include evaluating grant applications, reviewing research articles, writing grant proposals, supervising graduate students, advising honours students, presenting data at conferences, serving on departmental and university committees, advancing the profession through external committee work, and the list goes on. Fortunately, I have been able to maintain a balanced life while juggling these various responsibilities, but this can be quite difficult at times.

Tell Us About the Importance of Evidence-Based Practice.

As psychologists, we have an ethical and professional responsibility to provide the most efficacious and cost-effective psychological interventions available. This means that it is crucial for psychologists to keep up to date on the research literature, evaluate published articles carefully, and use the best evidence available to inform each clinical decision we make and treatment strategy we utilize. Psychologists not only need to read and distill the scientific literature but apply it within the context of a client's unique characteristics, cultural background, and treatment preferences. Not all research evidence is equal. When evaluating the scientific literature, "psychologists should first consider findings that are replicated across studies and that have utilized methodologies that address threats to the validity of obtained results (e.g., internal validity, external validity, generalizability, transferability)" (Dozois et al., 2014, p. 156). In addition to using the research literature to inform our clinical decisions, it is also important that we regularly

monitor and evaluate our interventions throughout treatment to determine whether what we are doing in therapy works. Evidence-based practice is particularly important because, as humans, we are prone to a range of biases that lead to errors in judgment and, potentially, in the use of ineffective treatment strategies. Science sets up safeguards against biases.

How Do You Integrate Science and Practice in Your Work?

I believe that many great research questions stem from clinical practice. I am also convinced that clinical practice is greatly enhanced when it is informed by the empirical literature. I very much adhere to the scientist-practitioner model in my own work and try to bring both sides of it into my teaching. In addition to keeping up on the latest research literature that is pertinent to my clinical work, I routinely and systematically evaluate treatment outcome. At the beginning of treatment, I conduct a thorough intake assessment with my patients so that I can gain a clear sense of what their presenting problems are, what factors might be contributing to the onset or maintenance of their difficulties, and how I may best intervene. Each week, I also ask my patients to complete symptom-based questionnaires and other self-report instruments so that I can determine whether my interventions are successful or whether I need to re-conceptualize the case or confront motivational issues. My research is also clinically applied and informed by clinical issues.

What Do You See as the Most Exciting Changes in the Profession of Clinical Psychology?

There are many exciting trends in the profession of clinical psychology. One change that I find particularly exciting is the increased demand for evidence-based treatments and assessment strategies. I appreciate this age of increased accountability because I believe that it will enhance our profession and the care that we provide. We have been able to demonstrate that psychotherapy not only works but is cost effective and prevents relapse. I am also excited about the fact that research continues to refine and advance our understanding of vulnerability to psychopathology and mechanisms of change. With such increased understanding, we will be better able to treat and prevent mental disorders and promote mental health and quality of life.

and intervention services relies on basic research into the nature of emotional distress and well-being. The practice of clinical psychology uses scientifically based methods to reliably and validly assess both normal and abnormal human functioning. Clinical psychology involves gathering evidence about optimal strategies for delivering health care services.

Over the decades, the nature and definition of clinical psychology has shifted, expanded, and evolved. From an initial primary focus on assessment, evaluation, and diagnosis, the scope of clinical psychology has grown. Clinical psychology now also includes numerous approaches to intervention and prevention services that are provided to individuals, couples, and families. The practice of clinical psychology also covers indirect services that do not involve contact with those suffering from a mental disorder, such as consultation activities, research, program

EXHIBIT 1.2 | International Definitions of Clinical Psychology

American Psychological Association, Society Of Clinical Psychology

The field of Clinical Psychology involves research, teaching and services relevant to the applications of principles, methods, and procedures for understanding, predicting, and alleviating intellectual, emotional, biological, psychological, social and behavioral maladjustment, disability and discomfort, applied to a wide range of client populations. In theory, training, and practice, Clinical Psychology strives to recognize the importance of diversity and strives to understand the roles of gender, culture, ethnicity, race, sexual orientation, and other dimensions of diversity. (www.div12.org/about-us/)

British Psychological Society

Clinical psychology aims to reduce psychological distress and to enhance the promotion of psychological well-being. Clinical psychologists deal with a wide range of mental and physical health problems including addiction, anxiety, depression, learning difficulties and relationship issues. They may undertake a clinical assessment to investigate a clients' situation. There are a variety of methods available including psychometric tests, interviews and direct observation of behaviour. Assessment may lead to advice, counselling or therapy. (http://www.bps.org.uk/sites/default/files/images/your_journey_web_0.pdf)

New Zealand Psychologists Board

Clinical Psychologists apply psychological knowledge and theory derived from research to the area of mental health and development, to assist children, young persons, adults and their families with emotional, mental, developmental or behavioural problems by using psychological assessment, formulation and diagnosis based on biological, social and psychological factors, and applying therapeutic interventions using a scientist-practitioner approach. (www.psychologistsboard.org.nz/scopes-of-practice2)

development, program evaluation, supervision of other mental health professionals, and administration of health care services. Given the ever-changing nature of the field, the only certainty about clinical psychology is that it will continue to evolve. Time will tell whether this evolution ultimately leads to a decreasing focus on traditional activities of face-to-face assessment and treatment (as predicted by some experts), to an increasing focus on the use of psychopharmacological agents to treat mental illness and mental health problems (as promoted by some psychologists and some psychological associations), or to the adoption of universal prevention programs designed to enhance our protection from risk.

The Canadian Psychological Association's Section on Clinical Psychology defined the current nature of clinical psychology and firmly grounded the practice of clinical psychology in the context of professional ethics and responsibility. An excerpt of this definition is presented in Exhibit 1.3.

EXHIBIT 1.3 | Canadian Definition of Clinical Psychology

Approved By the Clinical Section and the Board of Directors of the Canadian Psychological Association, May 1993

Clinical psychology is a broad field of practice and research within the discipline of psychology, which applies psychological principles to the assessment, prevention, amelioration, and rehabilitation of psychological distress, disability, dysfunctional behaviour, and health-risk behaviour, and to the enhancement of psychological and physical well-being.

Clinical psychology includes both scientific research, focusing on the search for general principles, and clinical service, focusing on the study and care of clients, and information gathered from each of these activities influences practice and research.

Clinical psychology is a broad approach to human problems (both individual and interpersonal), consisting of assessment, diagnosis, consultation, treatment, program development, administration, and research with regard to numerous populations, including children, adolescents, adults, the elderly, families, groups, and disadvantaged persons. There is overlap between some areas of clinical psychology and other professional fields of psychology, such as counselling psychology and clinical neuropsychology, as well as some professional fields outside of psychology, such as psychiatry and social work.

Clinical psychology is devoted to the principles of human welfare and professional conduct as outlined in the Canadian Psychological Association's *Canadian Code of Ethics for Psychologists*. According to this code, the activities of clinical psychologists are directed toward: respect for the dignity of persons; responsible caring; integrity in relationships; and responsibility to society.

Evidence-Based Practice in Psychology

Originally developed within medicine, the **evidence-based practice** (EBP) model is now integrated into many health and human service systems, including mental and behavioural health care, social work, education, and criminal justice (McHugh & Barlow, 2010; Mullen & Streiner, 2004). The EBP model

a. requires the clinician to synthesize information drawn from research and systematically collected data on the patient in question, the clinician's professional experience, and the patient's preferences when considering health care options (Institute of Medicine, 2001; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996); and

b. emphasizes the importance of informing patients, based on the best available research evidence, about viable options for assessment, prevention, or intervention services.

In modern health care, it is essential that services are based on research. Indeed, the Canadian Psychiatric Association presented evidence-based practice as an ethical imperative (Goldner, Abass, Leverette, & Haslam, 2001). In order to practise in an evidence-based manner, a health care professional must be familiar with the current scientific literature and must use both the research evidence and scientifically informed decision-making skills to determine the ways in which research evidence can inform service planning for a patient.

Although the EBP model now dominates the field of clinical psychology, some psychologists express doubt that clinical psychology can ever be effectively guided by scientific knowledge. Critics of a science-based approach to clinical psychology have expressed the following concerns:

- Group-based data cannot be used in working with an individual—Critics argue that because a great deal of psychological research is based on research designs that involve the study of groups of individuals, it is difficult to determine the relevance of research results to any specific individual.

- Clients have problems now, and we cannot afford to wait for the research—Critics argue that developing, conducting, and replicating research findings takes substantial time, and thus the information provided by researchers inevitably lags behind the needs of clinicians to provide services to people in distress.

- Each individual's unique constellation of life experience, culture, and societal context makes it unlikely that general psychological principles can ever provide much useful guidance in alleviating emotional distress or interpersonal conflict.

- There is simply no research evidence on how to understand or treat many of the human problems confronted by clinical psychologists on a daily basis.

Although these kinds of concerns sound reasonable enough, they lead to the suggestion of basing psychological practice on the individual psychologist's gut feelings, intuition, or experience. The idea that clinical psychology is primarily a healing art rather than primarily a science-based practice is extremely problematic. As we discuss in subsequent chapters, there is ample evidence that people are prone to a host of decision-making errors and biases. Because psychologists are not immune from these errors and biases, they risk making serious mistakes in evaluating and treating clients. Thus, over-reliance on the psychologist's professional experience and general orientation to understanding human functioning can be risky if it is not balanced with the application of scientifically based knowledge and with a scientific approach to developing and testing clinical hypotheses.

As you will see in subsequent chapters, evidence-based practice in psychology can be thought of as an approach to decision-making in the delivery of services. An understanding of scientific principles and findings guides the psychologist in the selection of assessment and intervention strategies that are most suitable for the individual. Ongoing monitoring during services then allows the psychologist to adapt services to the person's context, preferences,

evidence-based practice: a practice model that involves the synthesis of information drawn from research and systematically collected data on the patient in question, the clinician's professional experience, and the patient's preferences when considering health care options.

Do you think it is responsible to offer services that have no evidence of effectiveness? When effective treatments exist, is it reasonable to continue to offer services of undocumented effectiveness? If you were advising a friend to seek services, would you suggest looking for services that have been shown to be helpful for similar problems? If not, then why not?

In what ways is clinical psychology similar to other mental health professions?

and responses to the services. As a result, this means that services are not only based on scientific evidence but are tailored to the individual needs of each client.

As we describe in the next chapter, current training models in clinical psychology all emphasize the need for psychologists to be competent in the use and interpretation of scientific methods. Indeed, the EBP model has been endorsed by both the Canadian Psychological Association (Dozois et al., 2014) and the American Psychological Association as the basis for the professional practice of psychology (APA Presidential Task Force on Evidence-Based Practice, 2006).

Mental Health Professions

The definitions of clinical psychology provide an important perspective on the nature and function of modern clinical psychology. However, it is useful to describe other health care professions whose services and client populations overlap those of clinical psychology. In the following pages, we describe several other professions, some of which also involve extensive training in psychology.

Within the field of psychology, what is unique about clinical psychology? The definitions we presented emphasized that clinical psychology is primarily concerned with the *application* of psychological knowledge in assessment, prevention, and/or intervention in problems in thoughts, behaviours, and feelings. Of course, in addition to providing psychological services, many clinical psychologists also conduct psychological research and contribute important information to the science of psychology. Nevertheless, the objective of research in clinical psychology is to produce knowledge that can be used to guide the development and *application* of psychological services.

Clinical psychology shares many of the research methods, approaches to statistical analysis, and measurement strategies found in other areas of psychology. Many areas of psychology, such as cognitive, developmental, learning, personality, physiological, and social, generate research that has direct or indirect applicability to clinical psychology activities. However, the key purpose of research in these other areas of psychology is to generate basic knowledge about human functioning and to enhance, in general terms, our understanding of people. The fact that some of this knowledge can be used to assess and treat dysfunction and thereby improve human functioning is of secondary importance.

Many psychologists apply their knowledge in diverse applied fields. In Chapter 15, you will learn about health psychologists, forensic psychologists, and neuropsychologists—typically, these professionals are trained in clinical psychology and also have specialized training in their specific areas of research and practice. Two other areas of applied psychology, counselling psychology and school psychology, also provide important mental health services to the public. Although there is some similarity to clinical psychologists in their training and practices, these psychologists bring unique skills to the assessment, prevention, and treatment of mental health problems.

Counselling Psychology

It is important to distinguish between counselling psychology and counselling. Counselling is a generic term used to describe a range of mental health professions with various training and licensure requirements (Robiner, 2006). Estimates indicate that there are 49.4 counsellors per 100,000 people in the United States. The comparable figure for psychologists is 31.1 per 100,000 (Robiner, 2006). Turning specifically to counselling psychology, this profession has a great deal in common with clinical psychology. Historically, the distinction between clinical and counselling psychology was in terms of the severity of problems treated. Traditionally, the focus of clinical psychology was on the assessment and treatment of psychopathology—that is, manifestations of anxiety, depression, and other symptoms that were of sufficient severity to warrant a clinical diagnosis. On the other hand, counselling psychologists provided services to

individuals who were dealing with normal challenges in life: predictable developmental transitions, such as leaving home to work or to attend university or college, dealing with changes in work or interpersonal roles, and handling the stress associated with academic or work demands. Simply put, counselling psychologists dealt with people who were, by and large, well adjusted, whereas clinical psychologists dealt with people who were experiencing significant problems in their lives and who were unable to manage the resulting emotional and behavioural symptoms.

Another distinction between the two professions was the type of setting in which the practitioners worked. Counselling psychologists were most commonly employed in educational settings (such as college or university counselling clinics) or in general community clinics in which various social and psychological services are available. Clinical psychologists, in contrast, were most likely to be employed in hospital settings—both in general hospitals and in psychiatric facilities. These traditional distinctions between clinical and counselling psychologists are fading due to changes within both professions. Contemporary counselling psychologists provide services to individuals who are having difficulty functioning—providing, for example, treatment to university students suffering from disorders such as major depressive disorder, panic disorder, social anxiety disorder, or eating disorders (Benton, Robertson, Tseng, Newton, & Benton, 2003; Kettman et al., 2007). Both clinical and counselling psychologists are now employed in a wide range of work settings, including public institutions and private practices. In 2009, to aid in clearly defining and describing counselling psychology as a specialty within professional psychology, the Canadian Psychological Association adopted a definition of Canadian counselling psychology (Bedi et al., 2011).

Over time, clinical psychologists have expanded their practice to address human problems outside the usual realm of mental health services by providing other services such as couples therapy, consultation, and treatment for people dealing with chronic illness and stress-related disorders. Thus, clinical psychologists developed services for individuals whose problems would not meet criteria for any psychopathological condition. Clinical psychologists have also begun to develop programs that are designed to prevent the development of problems. At one level, it is a rather tenuous decision to mark professional boundaries between counselling and clinical psychology on the basis of the possible differences between what constitutes "normal" range distress and abnormal levels of distress. Depending on the point in time in which someone seeks help, the same person might present with symptoms severe enough to meet diagnostic criteria for a mental disorder or with less severe, subclinical symptoms.

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Traditionally, counselling psychologists were most commonly found in educational settings, such as university clinics.

In many countries, there is no distinction between clinical and counselling psychology. In others, the distinction is becoming less and less meaningful for any practical purpose. In Canada, for example, the regulatory body for the profession of psychology in Ontario (the College of Psychologists of Ontario) requires that both counselling and clinical psychologists have the training and expertise to diagnose mental disorders. Just like clinical psychology, counselling psychology promotes the use of scientifically based interventions. This drive to provide evidence-based services is likely to have substantial implications for both training and practice in counselling psychology. The source of the distinction between the two psychology professions in some countries is that clinical and counselling psychologists are usually trained in different academic settings and in different academic traditions. Counselling psychology programs are found, for the most part, in faculties of education and/or departments of educational psychology. Clinical psychology programs, on the other hand, are based in psychology departments.

Data from surveys in Canada and the United States indicate that clinical psychology programs attract far more applicants than do counselling psychology programs (Bedi, Klubben, & Barker, 2012; Norcross, Kohout, & Wicherski, 2005). Research on clinical disorders is more commonly conducted in clinical psychology programs, and research on minority adjustment and academic/vocational issues is more frequently conducted in counselling psychology programs. Although there are differences in the training of clinical and counselling psychologists, it is worth noting that students in these professional psychology programs take a greater number of courses in psychology and mental health than do trainees in any other mental health discipline (Murdoch, Gregory, & Eggleton, 2015).

School Psychology

School psychologists have specialized training in both psychology and education. In the United States, school psychologists are employed in diverse organizations such as schools, clinics, and hospitals, and in private practice. In Canada, most school psychologists are employed by school boards. Given the focus on children's functioning, there is a natural overlap between school psychology and child clinical psychology. Historically, school psychology emphasized services related specifically to the learning of children and adolescents, including the assessment of intellectual functioning; the evaluation of learning difficulties; and consultation with teachers, students, and parents about strategies for optimizing students' learning potential. Clinical child psychology focused on the treatment of a diagnosable mental disorder.

FatCamera/Getty Images

School psychologists now take into account the social, emotional, and physical influences on students' learning and development.

Over time, the scope of school psychology has expanded in response to the demands of parents, school systems, and governments. Because of growing awareness of the deleterious effects on learning of child and adolescent psychopathology, parental psychopathology, and stressful family circumstances, the work of school psychologists now addresses students' mental health and life circumstances more broadly. The role of school psychologists now includes attention to social, emotional, and medical factors in a context of learning and development. These changes, combined with legal obligations that schools provide the most appropriate education for all children, have resulted in school psychologists diagnosing a range of disorders of childhood and adolescence, as well as developing school and/or family-based programs to assist students to learn to the best of their abilities. School psychologists have also taken a leadership role in the development of school-based prevention programs designed to promote social skills, to reduce bullying, to facilitate conflict resolution, and to prevent violence (Kratochwill, 2007). These are described in detail in Chapter 10.

In the United States, there are estimated to be 11.4 school psychologists per 100,000 people (Robiner, 2006). Despite the increasingly close connections between school and child clinical psychology, it is likely that the two disciplines will remain distinct, at least in the near future.

Psychiatry

Although we have focused on psychology-based professions thus far, it is important to note that primary care physicians provide more mental health services than any other health care profession (Robiner, 2006). As medical generalists, these physicians are usually the first health care professionals consulted for any health condition, be it physical or mental. Psychiatrists are physicians who specialize in the diagnosis, treatment, and prevention of mental illnesses. Like all physicians, in four years of medical school training they learn about the functioning of the human body and the health services that physicians provide. As with other medical specialties, training as a psychiatrist requires five years of residency training after successful completion of basic medical training. A range of residency options are possible, including both broad training in psychiatric services and specific training in subspecialties such as child psychiatry or geropsychiatry. Once they have completed specialization in psychiatry, psychiatrists rarely examine or treat the basic health problems that were covered in their medical training.

Psychiatric training differs in important ways from applied psychology training. First, psychiatric training deals extensively with physiological and biochemical systems and emphasizes biological functioning and abnormalities. Psychiatrists are well qualified to determine whether mental disorders are the result of medical problems and to unravel the possible interactions between physical illnesses and emotional disturbances. Psychiatric training provides the skills to evaluate the extent to which psychological symptoms result from or are exacerbated by medications used to treat physical ailments and chronic illnesses. On the other hand, compared with psychologists, psychiatrists receive relatively little training in human psychological development, cognition, learning, or psychological functioning in general. Standard psychiatric training provides only limited training in research skills such as research design and statistical analysis. Many psychiatrists have become active researchers and have contributed in

important ways to the knowledge base of the neurosciences and human sciences. Nevertheless, the average psychiatry resident receives far less training in research than does the average graduate student in clinical psychology. An expert panel in the United States warned that unless research training in psychiatric residency programs was dramatically strengthened, research by American psychiatrists risked dwindling to the point of "extinction" (McLellan, 2003).

Another fundamental difference between training in clinical psychology and psychiatry is that psychiatric training generally emphasizes psychopharmacological treatment over psychological treatment. Accordingly, compared with psychologists, psychiatrists tend to receive less training in the use of scientifically based psychological assessment and psychotherapy. Historically, psychiatrists were trained in forms of psychoanalytic and psychodynamic treatments such as those developed by Sigmund Freud, Carl Jung, and Alfred Adler. Due in part to the proliferation of effective psychopharmacological treatments in recent decades and the growing emphasis on evidence-based practice in psychiatry, there has been a waning of emphasis on training in psychoanalytic and long-term psychodynamic psychotherapy. There is growing attention paid to training psychiatrists in evidence-based treatments, which may include cognitive-behavioural and interpersonal therapies (cf. Hoge, Tondora, & Stuart, 2003; Martin, Saperson, & Maddigan, 2003). Despite the tendency for many psychiatrists to favour psychopharmacological approaches to treatment, psychiatrists were among the pioneers in the development of evidence-based psychological treatments: Aaron Beck was the primary developer of cognitive therapy for depression (and subsequently other disorders), Gerald Weissman was the primary developer of the interpersonal treatment of depression, and Isaac Marks has played a prominent role in the development of cognitive-behavioural treatments for anxiety disorders. Thus, although the relative emphasis of psychotherapy within the profession differs from that in clinical psychology, the provision of psychotherapeutic services remains, for many psychiatrists, a central aspect of psychiatric services. Attesting to this, the Canadian Psychiatric Association issued a position statement characterizing the provision of psychotherapy as an integral component of psychiatric care (Chaimowitz, 2004). Similarly, in 1998, the American Academy of Child and Adolescent Psychiatry took the position that psychotherapy must remain a core skill in the practice of child and adolescent psychiatry.

In the past, an important distinction between clinical psychologists and psychiatrists was that only psychiatrists could prescribe medication. However, in some American jurisdictions, this is no longer the case. Programs through the federal Department of Defense and the Indian Health Service, as well as some state legislatures, have made provisions for psychologists to receive training to prescribe psychoactive medication. Canadian psychologists do not currently have prescription privileges. In Chapter 2, we will discuss this issue in greater detail.

There are currently approximately 4,770 psychiatrists in Canada (Canadian Psychiatric Association, 2016). In the United States, there are estimated to be 13.7 psychiatrists per 100,000 people (Robiner, 2006). The profession of psychiatry is facing a worldwide problem in recruiting new professionals. In many countries, even those as socially and economically different as Britain and India, the number of graduating medical students who wish to specialize in psychiatry has been insufficient to meet the demand for psychiatrists (Brockington & Mumford, 2002; Tharyan, John, Tharyan, & Braganza, 2001). In the United States, the number of medical students seeking psychiatric residencies has fallen by over 40% since the 1980s—only 3% of American medical students seek psychiatric training (Tamaskar & McGinnis, 2002).

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Psychiatric services often emphasize both psychopharmacological and psychological treatments.

Clinical Social Work

Social workers focus on ways to improve the health and well-being of individuals, families, groups, and communities. Social work practice includes activities such as policy development, program planning, program management, research consultation, case management, discharge planning, counselling, therapy, and advocacy (Canadian Institute for Health Information [CIHI], 2011a). Social workers are employed in diverse settings, including hospitals, community mental health centres, mental health clinics, schools, advocacy organizations,

government departments, social service agencies, child welfare settings, family service agencies, correctional facilities, social housing organizations, family courts, employee assistance programs, school boards, and private counselling and consultation agencies (CIHI, 2011a). The titles "social worker" and "registered social worker" are protected in legislation and can be used only by those who meet the regulations and standards of their provincial or territorial regulatory bodies. However, not all social workers are required to be registered with a regulatory authority (CIHI, 2011a).

The number of registered social workers in Canada has been growing steadily over recent years. In 2013, there were almost 44,000 licensed social workers in Canada (CIHI, 2015). Many social workers function as part of a mental health team in the role of case manager who, in collaboration with the patient, coordinates services with a range of social and community agencies, medical services, and other services (such as vocational or sheltered employment activities). In their role as case managers, social workers assist patients to navigate what is often experienced as a maze of service providers and a series of conflicting demands presented by various agencies. Case management is especially important in assisting people who suffer from severe and debilitating mental disorders such as schizophrenia and bipolar disorder.

Across jurisdictions, there is variability in the education required to practise social work. For example, the Alberta College of Social Workers requires a two-year diploma, whereas other Canadian provinces require an undergraduate or a master's degree in social work. Social work training programs emphasize the social determinants and consequences of mental health and illness. As is the case in applied psychology and psychiatry, clinical social work faces increasing demands to provide evidence-based services. Given the move across so many mental health professions toward evidence-based services, evidence-based therapy, such as interpersonal therapy or cognitive therapy for the treatment of adult depression, could be provided by psychologists, psychiatrists, or clinical social workers.

Other Mental Health Professions

Psychiatric nurses are professionals who offer services to individuals whose primary care needs relate to mental and developmental health (CIHI, 2011a). Psychiatric nurses are responsible for managing administrative matters in inpatient settings, providing psychoeducation and counselling, and supervising ancillary services provided by others (such as nurses' aides and volunteers).

In the four western Canadian provinces, where registered psychiatric nurses are regulated as a distinct profession, there were 5,273 registered nurses in 2013 (CIHI, 2015). Psychiatric nurses are employed in diverse settings, including acute psychiatry, long-term geriatric care and home care, residential and community programs for the developmentally handicapped, forensic psychiatry, institutional and community-based corrections facilities, community mental health programs, special education programs for children, employee assistance programs, child guidance and family therapy clinics, chemical dependency programs, hospitals and special care homes, women's shelters and clinics, residential and community programs for adolescents, psychiatric nursing education, sheltered workshops, rehabilitation programs, vocational programs, self-help groups, and private practice (CIHI, 2011a). In all these settings, psychiatric nurses are on the front lines, providing direct services, as well as training and consultation. Practitioners of this specialty typically receive their training as part of a two- or three-year diploma program or during a baccalaureate degree. In addition to the regular training in general nursing, psychiatric nurses receive training in the management and treatment of those with mental disorders warranting admission to a hospital or other similar institution.

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Psychiatric nurses often provide direct services, such as home care.

In the residential care of children and adolescents with emotional and behavioural problems, front-line services may also be offered by child and youth care workers. Child and youth care workers usually have two-year college training in child development and behaviour management. In an attempt to meet the demand for mental health services while minimizing costs of services,

outpatient services are often provided by mental health counsellors. In most cases, these counsellors have a college diploma or certificate based on a structured training program (often less than two years in duration) focused on the assessment and treatment of specific mental health problems such as addictions or trauma. There are also a growing number of counsellors trained in applied behavioural analysis, a systematic form of assessment and intervention that is the treatment of choice for pervasive developmental disorders such as autistic disorder. Of all the professionals presented in this chapter, child and youth care workers and counsellors have the least training and are the least likely to be members of a regulated profession.

As you can see, mental health services are offered by diverse professionals with varied backgrounds and training. There is a movement across all mental health professions to adopt evidence-based practice. This clearly requires an appreciation of the research foundations of our assessment tools and interventions. Psychologists are well placed to conduct and interpret the research foundations of effective practice. The composition of the mental health workforce is constantly shifting as professions seek more cost-effective strategies to ensure that their services can be accessed by a broad range of people who require care. As it becomes clear that evidence-based services can be provided effectively by trained professionals with different backgrounds, the roles of clinical psychologists will inevitably alter.

Availability of Mental Health Service Providers

There is wide variability in access to major mental health professions in different countries. Data from the World Health Organization indicate that the mental health needs of approximately half the world's nations are woefully underserved by trained professionals, with fewer than 1 psychologist, psychiatrist, or social worker for every 100,000 people (World Health Organization, 2015). If we recall the data on the prevalence of mental health problems, even conservative estimates indicate that 1 in 10 people suffer from a mental disorder. Thus, in half the world, there is only 1 mental health professional for every 10,000 people who suffer from a mental disorder.

Canadian data indicate that, in 2013, there were 17,133 licensed psychologists practising in the country (CIHI, 2015). Table 1.1 provides details on the relative numbers of psychologists and psychiatrists in different countries, categorized on the basis of gross national income.

In addition to disparities between countries in the number of professionals providing mental health services, there are also regional disparities that affect the population. Key among such regional disparities is the difference between services available in urban and rural areas. By and large, those living in rural areas have fewer mental health professionals than do those living in urban areas. In Chapter 11, you will learn about an innovative training program to prepare psychologists for rural practice.

TABLE 1.1	**World Health Organization Data on Psychologists and Psychiatrists in World Bank Income Group Countries**	
	Psychologists (per 100,000 people)	**Psychiatrists (per 100,000 people)**
Global	0.7	0.9
Low-income countries	0.0	0.1
Lower middle-income countries	0.2	0.4
Upper middle-income countries	1.4	1.2
High-income countries	2.7	6.6

Adapted from World Health Organization (2015).

A Brief History of Clinical Psychology

In considering the history of clinical psychology, it is useful to think in terms of interwoven threads that include the history of assessment and intervention within clinical psychology, the history of clinical psychology becoming a profession, the history of the treatment of mental illness, the history of prevention, and the history of psychology itself. In the remainder of the chapter, we will provide an overview of key aspects of clinical psychology's history.

Because clinical psychology has developed in differing ways and rates in various countries, we cannot do justice to the multitude of important events that have shaped, and continue to shape, the discipline worldwide. In this section, we highlight events that have contributed significantly to the current form of clinical psychology evident in most English-speaking countries. Due to space constraints, we have not included all critical occurrences that were instrumental in the development and application of clinical psychology in non-English-speaking countries. Nevertheless, in reading the following pages, you should get a general sense of the influences that contributed to the growth of clinical psychology in North America and elsewhere. Given the key role of American clinical psychology in shaping the face of clinical psychology worldwide, much of what follows highlights key events in the United States. You will notice that not all the key figures who were influential in the development of clinical psychology were psychologists. Others include philosophers, psychiatrists, and members of related professions.

The Roots of Clinical Psychology

biopsychosocial approach: a theoretical framework that takes into account biological, psychological, and social influences on health and illness.

Numerous scholarly texts on the history of psychopathology and its treatment describe early proponents of the view that mental disturbances were caused by natural causes rather than by demonic possession. Among the early Greek scholars in the period of 500–300 B.C., Hippocrates (often called the father of medicine) emphasized what is now known as a **biopsychosocial approach** to understanding both physical and psychological disorders (i.e., that biological, psychological, and social influences on health and illness must be considered). In abnormal psychology and personality textbooks, you will have learned about Hippocrates' "bodily fluid" theory that imbalances in the levels of blood, black bile, yellow bile, and phlegm are responsible for emotional disturbance. The philosophers Plato and Aristotle are both credited with promoting some of Hippocrates' ideas, even though they did so in different ways. Plato emphasized the role of societal forces and psychological needs in the development and alleviation of mental disorders, whereas Aristotle emphasized the biological determinants of mental disorders.

In the late 1500s, St. Vincent de Paul proposed that mental and physical illnesses were caused by natural forces and that the extreme manifestations of mental disturbances such as psychotic behaviour were not caused by witchcraft or satanic possession. Unfortunately, the dominant approach to the treatment of mental illness in Europe and North America in the subsequent centuries was anything but humane. Those suffering from severe mental illness were isolated in asylums, most of which were far from conducive to the promotion of mental health. Numerous accounts of these institutions paint a picture of pain, despair, and desolation. Living conditions were often squalid, and the more aggressive patients were chained to walls. Treatments included calming extreme behaviour using bleeding with knives or leeches (this was believed to reduce excitation due to an excess of blood) or immersion in frigid water.

During the period of the Enlightenment in Europe and North America that began in the latter half of the 1700s, a new world view emerged in which problems could be analyzed, understood, and solved, and the methods of science could be applied to all natural phenomena, including the human experience. The impact of this philosophical movement on the treatment of the mentally ill was astounding. Reformer Philippe Pinel, the director of a major asylum in Paris in the late 1700s, ordered that the chains be removed from all mental patients and that patients be treated humanely. Around the same time in England, William Tuke advocated for the development of hospitals based on modern ideas of appropriate care and established a country retreat in which patients lived and worked. In the United States, Benjamin Rush promoted the use of moral therapy with the mentally ill (a treatment philosophy that encouraged the use of compassion and patience rather than physical punishment or restraints).
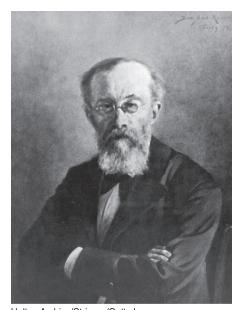
In what ways has scientific thinking shaped the evolution of clinical psychology?

About this time, within European medicine the specialty of neurology was growing rapidly. The increased attention to mental disorders led to the recognition that a number of conditions, such as hysteria (i.e., extreme, dramatic, and often odd behaviour, including limb paralysis), could not easily be accounted for with purely biological explanations. Jean-Martin Charcot, in France, is credited with being the primary developer of clinical neurology. As his fame grew, so did his emphasis on the role of psychological factors in hysteria. Charcot's use of suggestion and hypnosis to treat this condition initially attracted the attention of many physicians and medical students. Notable members of this group include Pierre Janet and Sigmund Freud, who initially embraced Charcot's theories and his use of hypnosis, but later went on to develop their own theories to account for hysteria.

The History of Assessment in Clinical Psychology

The early history of clinical psychology is largely the history of clinical assessment, as clinical psychology developed from psychology's focus on measuring, describing, and understanding human behaviour. Indeed, with some exceptions we discuss in the next section, clinical psychology was almost entirely an assessment-based discipline until the middle part of the 20th century. Milestones in the history of assessment in clinical psychology are noted in Exhibit 1.4.

EXHIBIT 1.4 | Timeline for the History of Assessment in Clinical Psychology

1879	Germany: *Measurement*. Wundt opens the first psychology laboratory measuring sensory processes.
1899	Germany: *Diagnosis*. Kraepelin develops the first diagnostic system.
1905	France: *Intelligence testing*. Binet and Simon develop a test to assess intellectual abilities in school children.
1917	U.S.: *Intelligence testing*. Army Alpha and Army Beta tests are developed to assess select soldiers.
1920s	Switzerland: *Projective testing of personality*. Rorschach publishes a book on the interpretation of inkblots.
1939	U.S.: *Intelligence testing*. Wechsler develops the Wechsler-Bellevue test of adult intelligence.
1940s	U.S.: *Projective testing of personality*. Murray and Morgan publish Thematic Apperception Test.
	Canada: *Intelligence testing*. Revised Examination M is used for selection and assignment in the military.
1943	U.S.: *Actuarial assessment of personality*. Hathaway publishes Minnesota Multiphasic Personality Inventory.
1952	U.S.: *Diagnosis*. The American Psychiatric Association publishes *Diagnostic and Statistical Manual of Mental Disorders*.
1954	U.S.: *Challenge to clinical decision-making*. Meehl distinguishes between statistical and clinical decision-making.
1968	U.S.: *Challenge to personality assessment*. Mischel proposes an alternative behavioural approach to assessment.
	U.S.: *Diagnosis*. The American Psychiatric Association publishes the second edition of *Diagnostic and Statistical Manual of Mental Disorders*.
1970s	U.S.: *Dimensional approach to child problems*. Quay, Achenbach, and Conners publish empirically based rating scales of child problems.
1980	U.S.: *Diagnosis*. The American Psychiatric Association publishes the third edition of *Diagnostic and Statistical Manual of Mental Disorders*.
1990s	Worldwide: *Increasing incorporation of behavioural assessment techniques into typical assessment practices*.
	Worldwide: *Widespread use of computers for scoring and interpreting psychological test results*.
1994	U.S.: *Diagnosis*. The American Psychiatric Association publishes the fourth edition of *Diagnostic and Statistical Manual of Mental Disorders*.
2000s	Worldwide: *Increased attention to the development of country-specific norms for commonly used measures of intelligence*.
	U.S. and Canada: *Increased attention to principles of evidence-based assessment in the selection and use of assessment instruments*.
2010s	Worldwide: *Increasing awareness that systematic treatment monitoring can dramatically enhance treatment outcomes*.
2013	U.S.: *Diagnosis*. The American Psychiatric Association publishes the fifth edition of *Diagnostic and Statistical Manual of Mental Disorders*.
2018	Worldwide: *Scheduled release of International Classification of Diseases, 11th revision*.

Hulton Archive/Stringer/Getty Images

Wilhelm Wundt established the first psychology laboratory.

By the latter part of the 1800s, the influence of the Enlightenment world view was also evident in the burgeoning application of scientific principles to understanding both normal and abnormal human behaviour. In England, Francis Galton studied individual differences among people, especially differences in motor skills and reaction times, which he believed were related to differences in intelligence. In Germany, Wilhelm Wundt, who studied sensation and perception, established the first psychology laboratory and was a central figure in advocating for psychology as the study of human experience. The American James McKeen Cattell, who at one time worked with Wundt, focused scientific attention on the connection between reaction time and intelligence. He is credited with coining the term *mental tests* to describe the battery of tests and tasks he developed to evaluate people's cognitive functioning.

Without a doubt, the pre-eminent individuals who influenced the early work on assessment in clinical psychology are the German psychiatrist **Emil Kraepelin** and the French psychologist **Alfred Binet**.

Kraepelin was convinced that all mental disorders were due to biological factors and that these biological causes of the disorders could not be effectively treated by the rather primitive methods available in the late 1800s and early 1900s. Accordingly, he devoted his career to the study and classification of mental disorders in the hope that his work would result in a scientifically based classification system that would have treatment implications. Consistent with scientific approaches of the time, a key component of Kraepelin's approach to classification was to examine the way in which various symptoms covaried. Kraepelin assumed that by examining the symptomatic behaviour of a large number of patients, it would be possible to discern the kinds of disturbances of affect, thought, and behaviour that typically co-occurred. In Kraepelin's view, this would provide insights into the nature of mental disorders. Kraepelin called these groups of symptoms that frequently co-occurred **syndromes**, and his classification system was built around identifying the ways in which these syndromes related to and differed from each other. Thus, the presence of a single symptom was considered of little value in determining the nature of the disorder suffered by the patient. However, Kraepelin assumed that by considering the entire range of symptoms exhibited by the patient, it should be possible to identify the precise disorder from which he or she was suffering. As his study of symptoms and syndromes deepened, he realized that there were consistent differences between disorders in terms of when the symptoms first occurred (i.e., onset of the disorder) and the manner in which the disorder progressed subsequently (i.e., the course of the disorder). Kraepelin's classification system was unparalleled, and his classification of what is now known as schizophrenia was one of his major accomplishments. Even though some clinical psychologists have reservations about the value or validity of psychiatric diagnosis, Kraepelin's influence on modern psychiatry and clinical psychology is substantial. The nature and structure of current mental disorder classification systems, such as the American Psychiatric Association's *Diagnostic and Statistical Manual* and the World Health Organization's *International Classification of Diseases* (which are discussed in Chapter 3), have their origins in Kraepelin's work. Reference to these classification systems is an integral part of routine professional activities, ranging from conducting psychopathology research to billing for psychological services.

syndrome: group of symptoms that frequently co-occur.

Alfred Binet's contribution to clinical psychology is quite different, although no less substantial. In the early years of the 20th century, the French government wanted all children to receive schooling to maximize their potential to learn and develop. In particular, there was concern to provide an education to those children with limited cognitive abilities who were unlikely to benefit from typical teaching methods. Before any special educational programs could be implemented, it was necessary to reliably identify children in need of such programs. Binet and his colleague Theodore Simon were invited to develop a strategy to measure mental skills that could yield information relevant to the identification of children with limited intelligence. By 1908, the two colleagues had developed the Binet-Simon scale of intelligence that consisted of more than 50 tests of mental skills that could be administered to children between the ages of 3 and 13 years. Binet and Simon gathered extensive data on a large number

of children—that is, they established norms. As we describe in more detail in Chapter 5, norms allow for the comparison of test scores obtained by an individual to the range of scores within the general population or within specific subgroups of the general population. Thus, by comparing the intelligence test score obtained by a particular child with norms for children of the same age, the child's level of intelligence could be determined. In 1916, Lewis Terman published a modification of this scale for use in the United States, the Stanford-Binet Intelligence Test, which was the first widely available, scientifically based test of human intelligence. Binet's work established the importance of standardization in the development of psychological tests and the importance of references to normative data in interpreting test results.

Building on Binet's pioneering work and Terman's adaptation of the Binet-Simon test, the field of psychological assessment grew rapidly. With the entry of the United States into the First World War, the American government needed procedures to quickly determine the fitness of many thousands of recruits to serve in the military. Physicians were employed to evaluate the physical fitness of the recruits for various military activities. In addition, it was necessary to find a way to evaluate mental fitness and mental abilities. Therefore, a committee of the recently established American Psychological Association (APA, established in 1892) was struck to develop a system for classifying the men in terms of their mental functioning. This committee was chaired by Robert Yerkes, APA president. Within a short time, the committee developed a measure of verbal mental abilities, called the Army Alpha test, which could be administered in a group format (thus minimizing the cost and time of administration). They also developed a test of non-verbal mental abilities, the Army Beta test, for assessing recruits who were unable to read or who had limited English language skills. This involvement of psychologists in a key American government initiative set the stage for psychologists to be recognized in North America for their expertise in test construction and the measurement of individual differences. A second legacy of this process was the establishment of the first standards for the development of scientifically sound psychological tests. A third legacy was that, as a result of the value placed on these testing-related skills, the discipline of clinical psychology was officially recognized within the APA by the creation of the Section on Clinical Psychology in 1919.

During the next two decades, several approaches to clinical assessment flourished. Measurement of abilities continued to be a central focus for clinical psychologists. A milestone in the development of intelligence tests for adults was reached in 1939 with the release of the Wechsler-Bellevue test. Its developer, David Wechsler, subsequently developed intelligence tests for the entire age range (Wechsler Preschool and Primary Scale of Intelligence, Wechsler Intelligence Scale for Children, Wechsler Adult Intelligence Scale) and the most commonly used general measure of memory (Wechsler Memory Scale). Although other intelligence scales have since been developed for children and adults, the Wechsler scales are considered the *gold standard* in the assessment of intellectual abilities. The Wechsler scales will be discussed at length in Chapter 7. This period also saw the development of interest tests, with measures such as the Strong Vocational Interest Blank and the Kuder Preference Record, which were developed for training and personnel-hiring purposes. Early self-report measures of temperament and personality became available with the release of Woodworth's Personal Data Sheet and the Allport-Vernon Study of Values.

Time Life Pictures/US Signal Corps/The LIFE Picture Collection/Getty Images

Psychological testing in World War I.

The 1930s also witnessed the emergence of projective tests to evaluate personality and psychological functioning. Whereas intelligence tests measure performance on a task, and paper-and-pencil personality tests are based on self-description, projective tests are predicated on the notion that an individual's interpretation of a situation is determined by his or her personality characteristics. Thus, a person's response to an ambiguous stimulus is presumed to tell us something about the person's mental functioning. One of the most influential and widely used projective tests, the Rorschach Inkblot Test, was published by Swiss psychiatrist Hermann Rorschach in 1921. Although the test received a decidedly cool reception among psychiatric and

psychological circles in Europe, it received a new lease on life when German psychologist Bruno Klopfer, who emigrated to the United States in 1934, began instructing psychology students at Columbia University on the use of the inkblots. The Rorschach Inkblot Test was also used in assessing children. Another projective technique that was considered suitable for both adults and children was the House-Tree-Person Test that involved interpretation of the psychological meaning of qualities of a person's drawing. Around the same time, American psychologists Henry Murray and Christina Morgan, working at the Harvard Psychological Clinic, published the Thematic Apperception Test (TAT), which comprised 20 pictures. Strongly opposed to the growing tendency to study psychological phenomena with experimental methods, Murray distanced himself from the mainstream of academic psychology, but he was greatly influenced in his thinking by the psychoanalytic writings of Sigmund Freud and Carl Jung. The development of projective tests proceeded without attention to the basic test construction objectives of standardization, reliability, validity, and norms, which has led to long-standing concerns about the quality and utility of many projective tests. These issues will be discussed at greater length in Chapter 8.

With the advent of the Second World War, psychologists once again became actively involved in the development and use of selection tests for the armed forces. In Canada, the Test Construction Committee of the Canadian Psychological Association was responsible for the development of the Revised Examination M that consisted of both verbal and non-verbal ability tests used in the selection and assignment of military personnel. However, the assessment milestone of the 1940s was unquestionably the publication of the Minnesota Multiphasic Personality Inventory (MMPI) by psychologist Starke Hathaway in 1943. The MMPI was, for many years to come, the epitome of the criterion-oriented approach to psychological test construction. The goal of the MMPI was to provide an easily administered test that could effectively screen for psychological disturbances among adults. To this end, Hathaway generated hundreds of test items that were administered to psychiatric patients. Items that were strongly associated with specific diagnoses were retained and then combined to make scales within the test. The ability of these scales to distinguish between people with and without psychiatric diagnoses was examined, and modifications to the scales were made based on these data. Evidence for the final scales' reliability and validity was gathered, and normative data (although rather poor) were obtained. Thus, in contrast to the projective tests, the development and interpretation of MMPI relied extensively on attention to statistical procedures and test development criteria. Research on the MMPI is discussed in Chapter 8.

The fundamental differences between projective tests, which rely heavily on clinical judgment, and the MMPI, which relies on statistical analysis, set the stage for a critical evaluation of the value and accuracy of assessment in clinical psychology in the 1950s and 1960s. **Paul Meehl's** 1954 review of the relative strengths of clinically and statistically based assessment highlighted a number of problems that plagued the assessment enterprise in clinical psychology. In essence, Meehl's review of the literature found that a purely clinical approach to assessment was typically inferior to a more statistically oriented approach to accurately describing or diagnosing adults. By clinical, Meehl referred to the typical collection of interview and other information that was then used, sometimes with standardized test data, to generate descriptions and predictions of behaviour. The statistical approach, in contrast, involved the use of basic demographic information (such as age, gender, and health information) and data from standardized tests that were entered into statistical equations to yield descriptions and/or predictions. This latter approach was similar to risk estimates calculated by insurance companies to assign differential insurance policy costs based on estimated risk. A point often lost in the ensuing debate about the value of clinical judgment was that Meehl advocated strongly for the use of clinical experience in generating hypotheses about human functioning or about particular client characteristics. He maintained, however, that once these hypotheses were formulated, whether for research or clinical purposes, scientific methods (including, whenever possible, standardized psychological measures) must be used to test the viability of the hypotheses.

A little over a decade after Meehl's critique of clinical assessment practices, the publication in 1968 of Walter Mischel's compelling analysis of the shortcomings of personality traits

for understanding human behaviour further eroded many clinical psychologists' confidence in the validity of their assessment work. Up to then, much of the research on personality had focused on the measurement and study of traits—that is, co-occurring characteristics that not only defined the personality of an individual but were also the primary influences in determining how an individual would react in a given situation. Mischel's work illustrated that these personality traits had more to do with how a person was viewed by others than with what a person actually did. Moreover, research on the predictive validity of personality traits typically yielded results of only moderate strength—in other words, knowing someone's personality traits provided very little useful information if you wished to know what someone would actually feel, think, or do in a particular situation. Much more accurate predictions of psychological experience could be obtained by considering both the person's past experiences in similar situations and the environmental influences on the person's behaviour in the situation.

Although many personality researchers and clinical psychologists believed that Mischel had underestimated the influence of personality factors and overestimated the power of social situations in determining behaviour, his analysis bolstered the rising influence of behavioural assessment approaches on clinical assessment. Initial behavioural approaches to assessment involved the identification of specific behaviours deemed to be central to the person's distress, by virtue of being either a key symptom that should be changed in therapy or a central factor responsible for causing and/or maintaining the person's distress. Based on learning principles encompassed under operant, classical, and observational learning paradigms, behavioural assessment focused on easily defined and observable events, current behaviours, and situational/environmental determinants of behaviour. For much of the 1960s and 1970s, behavioural assessment largely involved obtaining frequency, rate, and duration measures describing the behaviours of interest. Compared with the self-report and projective personality assessment approaches, behavioural assessment was much more focused on gathering clinical data that had immediate and obvious value in the planning and evaluation of treatment strategies. As behavioural strategies often require observation by a third party, they were most commonly applied in treating problems of children and patients in hospitals or residential institutions. Observation strategies are described in Chapter 6.

Although sound tools for the assessment of children's intellectual functioning were developed early in the 20th century, empirically based assessment of children's emotional and behavioural problems did not begin in earnest until the 1970s with the publication of the first rating scales of children's behaviour. Different scales pioneered by Thomas Achenbach, Herbert Quay, and Keith Conners shared the same reliance on description of behaviours and on empirically derived scales to assess children's functioning. These scales required parents to rate the extent to which a particular behaviour was typical of their child. Like the MMPI, the items on these scales were subjected to factor analysis, so that scale scores were derived empirically. Such rating scales provide information on children's functioning on a number of dimensions rather than yielding a categorical diagnosis.

In the 1980s, the publication of the third edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM) led to increased attention on the value of structured interview approaches to gathering diagnostic information. For many years, research had consistently demonstrated that clinicians (including clinical psychologists and psychiatrists) were very inconsistent in how they interviewed patients. Such inconsistencies were evident both from clinician to clinician and even by the same clinician over time. The result of these inconsistencies often led to the same individual being assigned very different diagnoses from clinicians. Such diagnostic inconsistency has the potential to dramatically affect the types of treatments recommended to the patient. The DSM-III was an explicit attempt to improve the reliability of psychiatric diagnoses by providing as clear guidance as possible on specific criteria that must be met to render a diagnosis. Based on the common measurement strategy in psychopathology research of using a standardized, structured interview to generate diagnostic information, clinicians were strongly encouraged either to use scientifically established structured interviews to diagnose DSM-III disorders or, at a minimum, to ensure that the necessary diagnostic criteria were met before a diagnosis was assigned. Particular attention has been paid to the development of structured diagnostic interviews for children

to ensure that questions are formulated in a manner that is developmentally appropriate. For example, it is not suitable to put complex questions about the duration of a problem to a child who has not yet developed a concept of time. Issues related to interviewing are addressed in Chapter 6.

Finally, there have been a number of striking changes in psychological assessment over the past three decades. One important change has been a rapprochement among different perspectives on how best to conduct psychological assessments. For most assessment purposes, it is generally accepted that assessment data should be obtained from (a) multiple methods, such as interviews, observations, and self-reports; and, increasingly, (b) multiple informants (i.e., not just from the client). A second important change has been the recognition that best practices in assessment should be based on assessment methods and measures that have solid scientific support. Issues of the psychometric properties of measures and the representativeness of norms used to interpret test scores are now commonly considered by psychologists. We will comment more on these issues in the chapters on assessment.

Another important change has been the increased attention to the relevance of assessment data for treatment planning and treatment evaluation. Decades of research amply demonstrate that psychologists can create assessment tools for myriad constructs. Many thousands of studies have been published on the reliability and validity of a huge range of psychological measures. However, it has become increasingly clear that, to justify the time and expense involved in clinical assessment, this vast knowledge must be applied in ways that are directly pertinent to improving the lives of people suffering psychological distress. Combined with concerns about costs and accountability of health care systems worldwide, this has highlighted two issues that clinical psychologists involved in assessment are beginning to address. The first issue is one of **clinical utility**: that is, does having assessment data on a patient actually provide information that leads to a clinical outcome that is better (or faster or less expensive) than would be the case if the psychologist did not have the assessment data? This issue reflects the problem that research on clinical psychology is often disconnected from research on interventions in clinical psychology and vice versa. As concerns about health care costs mount, clinical psychologists must justify to those who pay for their services the relevance of their assessment activities. The second, and related, current issue is one of **service evaluation**. Put bluntly, individual clinical psychologists are under increasing pressure to demonstrate that their services work. This has resulted in renewed attention to the role of clinical assessment in documenting progress and outcome in treatment. However, this need to demonstrate treatment effectiveness leads to a different type of clinical assessment than has often been used in the past. Whereas many clinical psychology measures were developed to give a broadly based psychological picture of the whole person, current assessment practices require that measures focus on specific problems (or strengths), be brief, and be amenable to repeated use. The measurement tools that are useful for generating an individual's psychological profile are not necessarily the ones that are relevant to the repeated assessment of someone receiving treatment. Accordingly, a minor revolution in the nature of clinical assessment is currently underway, with some traditional measures falling from favour and some long-standing but underused assessment strategies coming to the fore. These issues are discussed in greater detail in Chapters 6, 7, and 8.

clinical utility: usefulness of assessment data to provide information that leads to a clinical outcome that is better (or faster or less expensive) than would be the case if the psychologist did not have the assessment data.

service evaluation: activities designed to examine whether or not services work.

The History of Intervention in Clinical Psychology

Milestones in the evolution of intervention in clinical psychology are noted in Exhibit 1.5. The modern history of psychotherapy is typically seen as beginning with the work of Sigmund Freud and the development of psychoanalysis. As indicated earlier in this chapter, a number of European psychiatrists, such as Charcot and Janet, were actively involved in using verbal rather than physical approaches to the treatment of mental disorders in the late 1800s. Freud is credited with developing the first elaborated approach to the psychotherapeutic treatment of common psychological difficulties, even though subsequent historical analysis of his work suggests that it may not have been as original or revolutionary as he often suggested (Ellenberger, 1970). The 1900 publication of his book *The Interpretation of Dreams* marked an important milestone

EXHIBIT 1.5 | Timeline for the History of Intervention in Clinical Psychology

1896	U.S.: Witmer opens the first psychology clinic.
1900–1930s	Europe, U.S., UK: Development of psychoanalytic approaches.
1920s	U.S.: First behavioural treatment of anxiety by Cover Jones.
1940s	U.S. and Europe: Increased demand for services to deal with war-related distress.
1942	U.S.: Rogers publishes *Counseling and Psychotherapy*, introducing a client-centred approach.
1952	UK: Eysenck publishes a review questioning the usefulness of psychotherapy with adults.
1957	U.S.: Levitt publishes a review questioning the usefulness of psychotherapy with children.
1958	South Africa: Wolpe publishes an article on the behavioural treatment of phobias.
1977	U.S. and Canada: Meichenbaum publishes *Cognitive-Behavior Modification: An Integrative Approach*.
1979	U.S.: Beck, Rush, Shaw, and Emery publish *Cognitive Therapy for Depression*.
1980	U.S.: Smith, Glass, and Miller publish *Effects of Psychotherapy*, providing results of a meta-analytic review of treatment for adults.
1987	U.S.: Weisz, Weiss, Alicke, and Klotz publish a meta-analytic review of treatment for children and adolescents.
1991	U.S.: Richard McFall publishes *Manifesto for a Science of Clinical Psychology*.
1995	U.S.: The American Psychological Association's Division of Clinical Psychology defines criteria to evaluate the degree of empirical support for treatments.
1996	UK: Roth and Fonagy publish *What Works for Whom? A Critical Review of Psychotherapy Research.*
1998	U.S.: Nathan and Gorman publish *A Guide to Treatments That Work*.
2005	U.S.: The American Psychological Association adopts its policy on *Evidence-Based Practice in Psychology*.
2012	Canada: The Canadian Psychological Association adopts its policy on *Evidence-Based Practice of Psychological Treatments*.

for the psychoanalytic movement and attracted both supporters and detractors. In subsequent years, psychiatrists such as Carl Jung and Alfred Adler joined Freud to develop and promote a psychoanalytic approach to the understanding and treatment of mental disorders. Ultimately, they and other followers split from Freud to develop their own theories and interventions.

The early decades of the 1900s were marked by the growth of numerous psychodynamic treatment approaches in Europe, which then spread to North America. These approaches differed widely in their core principles and techniques, but all were based on the assumption that most psychopathology stemmed from unconscious processes. For Freud, the unconscious was the source of all psychic energy as well as the repository of all our disappointments, hurts, and unfulfilled sexual and aggressive desires. He hypothesized that, to protect ourselves from the pain of continually re-experiencing these negative emotions and memories, we use a number of strategies called defence mechanisms such as denial, repression, and intellectualization. The goal of treatment is for the patient to gain insight into the origin of his or her problems (i.e., the painful contents of the unconscious) and the ways in which the defence mechanisms inadvertently block the person's full psychological development. Jung's model involved an aspect of the unconscious similar to Freud's (called the personal unconscious) but also included a much more positive form (called the collective unconscious) that could promote the individual's psychological growth. Jungian treatment emphasized, therefore, the importance of not only developing an awareness of the personal unconscious but also appreciating and harnessing the power of the collective unconscious.

Later psychodynamic models tended to de-emphasize the importance of unconscious determinants of behaviour. Alfred Adler's approach, for example, focused on the role of societal forces and socialization pressures in the development of personality and the treatment of disorders. His theory emphasized the impact of birth order on personality and the impact of social

comparison processes in which we may underestimate or overestimate our personal strengths and weaknesses. Anna Freud, a daughter of Sigmund Freud, who had received analysis from her father when she was a child, developed ego psychology that encourages the person to develop skills that can help address current problems. Although her approach still considered the unconscious a force to be reckoned with, she highlighted the role of conscious efforts to adjust to past difficulties and current life obstacles. Anna Freud took a leading role in modifying psychoanalytic approaches in treatment with children.

Even though they were undoubtedly influential in the development of clinical psychology treatments, these psychodynamic approaches were not the only contributors to our current forms of psychotherapy. Two other distinct approaches to the treatment of psychological distress emerged during the first decades of the 20th century. Lightner Witmer, an American student of Wundt's credited with being the first to use the term *clinical psychology*, established a clinic offering psychological services in 1896 and university training in clinical psychology in 1904. Witmer was a university professor whose interests lay primarily in the application of research to learning and memory processes. He consulted with teachers and others in school settings to apply the new science of psychology to the assessment and remediation of learning difficulties, intellectual and developmental delays, and, to some extent, behaviour problems. In retrospect, it is ironic that the psychologist often described as the father of clinical psychology was really setting the stage for what would now be seen as school psychology.

A second example of the application of scientific psychology to the understanding and treatment of psychological disorders can be found in conditioning research in the 1920s. Through his famous experiment with little Albert and furry white animals and objects, John Watson demonstrated that it was possible to use conditioning principles to explain the development of phobias. The next step that had important implications for treatment purposes was when Mary Cover Jones showed that the principles of conditioning could be used to extinguish a phobic reaction in a child. This initial work, using animal and human learning concepts and procedures, set the stage for what would later become behaviour therapy.

In the 1940s and 1950s, the demand for psychotherapy grew dramatically, due largely to the need to provide mental health services both to members of the military and to members of the public who were affected by the horror and losses of the war. In the United States, for example, the need for mental health professionals to provide counselling and therapy to returning soldiers could not be met by the relatively small number of psychiatrists practising in the country. As a result, the Veterans Administration agency turned to the profession of clinical psychology, hiring many psychologists and providing a substantial infusion of funds to aid in the formation of new training programs in clinical psychology. This led to an enormous increase in the number of clinical psychologists in the United States and to the eventual establishment in later decades of clinical psychologists' reputation as being among the best trained practitioners of psychotherapy.

Bettmann/Getty Images

Carl Rogers in 1979.

The 1940s and 1950s also saw a proliferation in the forms of psychotherapy available to the public. A major new movement in psychotherapy was initiated with the publication in 1942 of **Carl Rogers**' book *Counseling and Psychotherapy*. In contrast to the then-dominant psychoanalytic approach, Rogers' approach was rooted in an assumption that people were inherently capable of developing in a positive, healthy manner. The primary goal of therapy, therefore, was to provide a supportive environment in which clients could reconnect with their emotions, their losses, and their aspirations and thereby discover their true potential for growth. Rogers' work was crucial in the development of humanistic approaches to the understanding and treatment of human problems, an approach that has been termed the third force in psychotherapy (with psychodynamic and behavioural approaches being the first two). Of equal, if not greater importance, Rogers was an early and firm advocate of the need to conduct systematic research on the process and outcome of psychotherapy. His position was markedly different from that typical of the time, as what frequently passed as psychotherapy research was little more than case studies. You will learn more about the limitations of the case study approach to the study of human functioning in Chapter 4.

Changes were occurring in the psychodynamic approach to treatment as well, with Alexander and French publishing their book *Psychoanalytic Therapy* in 1946, in which they made a compelling case for briefer forms of psychoanalytic treatment. In the mid-1950s, Harry Stack Sullivan provided details on interpersonally focused strategies for intervening with patients. Outside the psychodynamic realm, new approaches within a humanistic/existential/experiential tradition were introduced, including Fritz Perls' concepts and procedures of gestalt therapy and Viktor Frankl's logotherapy. Finally, Joseph Wolpe published his work on systematic desensitization in 1958, thus setting the stage for the dramatic growth of the behavioural (and cognitive) therapies.

Hans Eysenck's (1952) critique of the effectiveness of psychotherapy was a turning point for psychotherapy research and training. Eysenck argued that the rates of improvement among clients receiving either psychodynamic or eclectic (i.e., an unspecified mix of theories and techniques) therapy were comparable to rates of remission of symptoms among clients receiving no therapy at all. He contended, therefore, that there was no evidence that the most commonly used forms of psychotherapy had any demonstrable effect. Although later proponents of these treatments pointed out substantial flaws in his arguments, Eysenck's review had two dramatic effects on the field. First, it crystallized dissatisfaction among many psychologists who did not agree with a psychodynamic approach to treatment and led to efforts to establish treatments that were directly connected to psychology's empirically derived knowledge. Second, it resulted in a flurry of research activity in the following decades focused on evaluating both new and traditional forms of psychotherapy. As we will see throughout this book, advances in psychological services for children and families often follow the same trends as are seen in services for adults; however, there is usually a time lag of a few years. Reviews of the child psychotherapy research (Levitt, 1957) reached similar conclusions to Eysenck with respect to adult psychotherapy.

The 1960s and 1970s, consequently, were decades marked by an increase in both the numbers of psychotherapies available to the public and the amount of research devoted to understanding whether psychotherapy was effective (and, if it was, what made it effective). In the early 1960s, Albert Ellis developed Rational Emotive Therapy, and Eric Berne introduced Transactional Analysis (an early forerunner of therapies aimed at enhancing personal growth and development as much as treating psychopathology). Using learning principles such as contingencies, shaping, and reinforcement, behaviour modification and behaviour therapy became widely adopted during this time to address problems as diverse as self-injurious behaviour, phobic avoidance, hyperactive behaviour, and sexual dysfunction. In tune with the growing attention to cognitive phenomena in psychology in general, behaviour therapy began to address cognitive elements in treatment. The publication in the late 1970s of two influential books laid the foundation for what is now known as cognitive-behaviour therapy. These now-classic texts were Don Meichenbaum's *Cognitive-Behavior Modification: An Integrative Approach*, which was published in 1977, and the first comprehensive treatment manual, *Cognitive Therapy of Depression: A Treatment Manual*, by Aaron Beck and his colleagues John Rush, Brian Shaw, and Gary Emery, which appeared in 1979. Cognitive-behavioural approaches are equally applicable to adults' and children's problems and gained popularity in the 1970s.

Dr. Michael Fenichel

Aaron Beck and Albert Ellis.

Another milestone was reached in 1980 when Smith, Glass, and Miller used a statistical technique called **meta-analysis** to review 475 controlled studies of psychotherapy. This technique (described in detail in Chapter 4) provides a means by which groups of studies can be statistically combined and compared. The authors' primary finding was that psychotherapy, in general, was clearly very effective, with the average person receiving therapy being better off after therapy than 80% of people with similar problems who did not receive therapy. The researchers also examined the efficacy of various types of treatment. Using different analytic techniques, they found that although there was general equivalence across divergent forms of psychotherapy, some therapies were superior to others for specific disorders and clinical

meta-analysis: a review technique by which groups of studies are statistically combined and compared.

problems. As we will see in Chapters 12 and 14, these results fuelled debates about the relative merits of psychotherapies that persist to the present.

Seven years later, a meta-analysis reported similar results for psychotherapy for children and adolescents, with 79% of treated children being better off after treatment than children and adolescents with similar problems who did not receive psychotherapy (Weisz, Weiss, Alicke, & Klotz, 1987). The impact of research such as this is addressed in Chapter 13.

The 1980s and 1990s saw several key developments in the history of psychotherapy. There was a dramatic increase in the amount of research on psychotherapy. Furthermore, there was a profound improvement in the methodological sophistication of those studies, with an increasing use of treatment manuals to guide interventions and standardized diagnostic criteria for assessing those receiving treatment. Numerous societal and health care pressures fuelled the demand for the development and dissemination of effective short-term treatments (i.e., treatments involving fewer than 20–25 sessions). This demand for short-term treatments was welcomed by proponents of disorder-specific cognitive-behavioural treatments. In addition, psychodynamic and humanistic/existential/experiential approaches were adapted to provide services over a shorter period of time. Numerous forms of interpersonally focused psychodynamic treatments emerged in Britain, Canada, and the United States, including Time-Limited Dynamic Psychotherapy developed by Hans Strupp and his colleagues. Within the experiential orientation, the emphasis was on more structured and directive interventions that melded traditional principles and values with contemporary knowledge of emotional functioning. Key among the proponents of this process-experiential treatment approach were Les Greenberg in Canada and Robert Elliott in the United States. In his 1991 presidential address to the Society for a Science of Clinical Psychology (a section of the American Psychological Association's Society of Clinical Psychology), **Richard McFall** challenged the field to provide only psychological services that research has shown to be effective and safe (McFall, 1991).

It should be clear from this overview that the practice of clinical psychology has been influenced by research on the impact of psychotherapy. Another landmark event occurred in 1995 with the release of the report by the American Psychological Association Division of Clinical Psychology's *Task Force on Promotion and Dissemination of Psychological Procedures*. The impetus for this task force came from increasing pressure in the United States for health care practices to be demonstrably effective as well as cost effective. Legislation and state case law were being used to shape the nature of federal and state health care policy, and there appeared to be a very real danger that access to mental health and behavioural health care services might be diminished because of perceptions that such services were both expensive and relatively ineffective. Clearly, a response from organized psychology was needed to underscore the efficacy of psychological interventions for certain disorders and conditions. The task force developed empirical criteria to aid in the determination of whether an intervention was efficacious in the treatment of a given disorder or clinical problem. Using these criteria, the task force then produced an initial list of efficacious treatments. The term **efficacy** is used to denote evidence that a treatment was shown to work under research conditions that emphasized internal validity, with the term **effectiveness** being reserved to describe evidence that the treatment was shown to work in real-world conditions. Predictably, this initiative was embraced by many, but not all, clinical psychologists.

Regardless of the strengths or limitations of this and related initiatives (which we discuss in Chapters 12 and 13), it has forever changed how clinical psychologists view the connection between empirical evidence and their therapeutic services. In the 1990s, the first editions of several books were published that reviewed the research base of psychological treatments for a range of disorders. Key among the books were *What Works for Whom? A Critical Review of Psychotherapy Research* by Roth and Fonagy (1996) and *A Guide to Treatments That Work* by Nathan and Gorman (1998). These influential texts have been updated several times to include recent research findings, and we will discuss them more in the chapters on psychological treatments.

The emphasis on grounding psychological services firmly in science culminated in the adoption of policies on evidence-based practice by both the American and Canadian psychological associations, which we described earlier in this chapter. Although the policies touch on all aspects of psychological services, it is likely that they will have the most impact on the treatment services provided by psychologists both within and outside these countries.

efficacy: evidence that a treatment has been shown to work under research conditions that emphasized internal validity.

effectiveness: evidence that a treatment has been shown to work in real-world conditions.

The History of Prevention in Clinical Psychology

It is clear that, globally, mental health services are woefully inadequate to address the mental health needs of the population. There is emerging evidence that investment in prevention yields long-term benefits in terms of enhanced well-being and reduced problems. (CIHI, 2011b; Washington State Institute for Public Policy, 2016)

The knowledge base of psychology should provide a strong foundation for programs designed to prevent physical and mental problems by reducing risk factors and enhancing protective factors (American Psychological Association, 2014b). Unfortunately, until recently, clinical psychologists have focused their services almost exclusively on those who already have problems. Due to growing awareness that psychological principles can be applied to promote healthy lifestyles, clinical psychologists now frequently play an important role in public health initiatives to change lifestyle-related illnesses. Concerns about youth mental health have led to the development of programs aimed at developing coping skills that maintain good mental health. In Chapter 10, we describe the current status of prevention programs in clinical psychology.

The Future

Predicting future events is always an uncertain business. Nevertheless, some brave psychologists have ventured to give their prognostications for future developments in clinical psychology. A 2009 survey of clinical child and adolescent psychologists asked respondents to predict major directions in clinical practice, research, and training for the coming decade (James & Roberts, 2009). In all three domains, evidence-based practice was predicted to have the greatest influence on the specialty area of clinical child and adolescent psychology. Similarly a survey of 70 psychotherapy experts (Norcross, Pfund, & Prochaska, 2013) asked participants to make predictions about the future. Participants expected that evidence-based practice would be required for practice and that clinical practice guidelines would become a standard part of regular services. Furthermore, they predicted an increasing use of technology in the delivery of services.

Of course, only time will tell which, if any, of these predictions will come to pass. Given the history of clinical psychology, perhaps the only certainty for the future is that exciting changes are in store for the profession and for those who practise it. That being said, trends starting in the past decade or two can give us some idea of the ways in which clinical psychology will develop and grow. Accordingly, it is almost certain that clinical psychology will be influenced by, among other factors, increasing need to provide psychological services for an array of health problems, not just mental health problems; develop services that respond to the health care needs of an aging population; ensure that psychological assessments, prevention programs, and treatments are both evidence-based and appropriate for the diverse range of people who receive these services; and enhance the impact of concurrent use of psychological and pharmacological interventions.

Summary and Conclusions

Worldwide, mental health problems have staggering emotional and financial costs. Compared with physical health problems, mental health problems are woefully underserved. There is a trend across all mental health professions to develop and disseminate evidence-based services so that these serious problems can be effectively and economically addressed.

Clinical psychology shares with other mental health professions a focus on assessment and intervention in the prevention and treatment of emotional, behavioural, and neurological problems. In contrast to psychiatry and psychiatric nursing, which have their roots in the treatment of pathology, psychology is grounded in the science of human behaviour.

Among the mental health professions, psychology is unique in its long-standing research tradition. From the beginning of their academic training, students in psychology learn to understand, interpret, and conduct methodologically sound research.

In tracing the history of psychological assessment, intervention, and prevention, it is clear that systematic observation and evaluation are hallmarks of clinical psychology. Drawing on a wealth of knowledge about human functioning and development, clinical psychologists have earned recognition for their expertise in assessment, treatment, and prevention of serious problems. The field of clinical psychology is in a process of constant evolution.

Key Names

Alfred Binet
Hans Eysenck
Emil Kraepelin

Richard McFall
Paul Meehl
Carl Rogers

Additional Resources

Journals

Clinical Psychological Science
Clinical Psychology: Science and Practice
Clinical Psychology Review
Professional Psychology: Research and Practice

Books

Barlow, **D. H.** (Ed.). (2011). *Oxford handbook of clinical psychology*. New York: Oxford University Press.

Cautin, **R. L.**, & **Lilienfeld**, **S. O.** (Eds). (2015). *Encyclopedia of psychology.* Hoboken, NJ: Wiley-Blackwell.

Check It Out!

The website of the Canadian Psychological Association provides information on the diverse sections of psychology, accreditation, and licensure: www.cpa.ca

The website of the American Psychological Association includes information related to the sciences and practice of psychology: www.apa.org

Psychologist Kenneth Pope's website provides resources on ethics, intervention, and critical thinking: www.kspope.com

The website for the National Institute of Mental Health provides information on diagnosis and treatment of mental disorders: www.nimh.nih.gov

The website of the UK National Institute for Health and Care Excellence provides clinical guidance on health issues: www.nice.org.uk