CHAPTER 1

The Research Consumer

“I always liked myself far better as a pure scientist.”

Carl R. Rogers

OBJECTIVES

By reading and studying this chapter, you should acquire the competency to do the following:

• Understand and value the emphasis on research skill development in graduate programs for mental health professionals.
• Describe the research knowledge standards mandated by professional organizations for all new therapists seeking a professional license.
• Explain the role of a practitioner-researcher in terms of both accountability and improving clinical practice.
• Describe the three general research frameworks guiding the selection and organization of research methods in counseling and related social sciences.
• Describe sources of research ideas and problems to solve for the beginning practitioner-researcher.

INTRODUCTION AND MAJOR THEMES

This chapter is organized around the theme of the well-informed research consumer. The conceptualization here of the practitioner is a professional who has the skill and knowledge to consume research. A well-informed consumer of research can identify sources of technical literature addressing areas of concern, read and evaluate research articles, and organize summaries of the current state of the profession regarding a topic or issue. These researchers are able to identify interventions and therapeutic approaches supported by data. They are also able to conduct ongoing evaluations of the success of their therapeutic interventions.
This chapter is divided into three major sections. The first is a description of the social forces within our society that make it necessary for people in the helping professions to have research and accountability skills. This position is reinforced in the second section with statements from the major professional societies and licensing boards for the helping professions detailing their expectations and mandates for new practitioners.

The third section of the chapter describes steps that an effective practitioner-researcher follows in problem solving. Scholars and other researchers may frame their work using different philosophies, but a common thread links all researchers in the behavioral sciences.

That section also discusses the researcher’s professional integrity and his or her commitment to the ethical use of evidence-based treatments. Practitioner-researchers have the ability to record and report findings of their own research and present those findings appropriately. Thus, they are conversant with various approaches for finding unbiased answers to clinical and other problems they encounter in their professional activities.

All too often, the development of clinical skills is divorced from the development of research skills. To borrow a metaphor from John Gray, it is as if “researchers are from Mars and therapists are from Venus.” Researchers complain that practitioners ignore emerging models of effective practice, while practicing therapists complain that research results are often difficult to interpret and not relevant to real-world practice. This division represents more than a problem of translation from science to practice; it is reinforced by the guiding philosophies of academic departments responsible for providing the education and development of new professionals in counseling and related social sciences.

RESEARCH KNOWLEDGE AND SKILL MANDATES FOR THERAPISTS’ TRAINING

For the past two decades, professional societies for counseling and clinical psychology have moved to increase the knowledge base of new members in the areas of research, statistics, measurement, and evaluation. The knowledge and skills now being required of new practitioners exceed those required of previous generations. New curricular requirements are enforced both through the educational standards that university-based programs must meet and by the requirements of the examinations that must be passed to qualify for a license as a practitioner.

Background

The costs of providing medical and psychological therapies have come under careful scrutiny and oversight in the past 50 years. Yet the history of the need for practitioners to document the effectiveness of their therapeutic interventions and control costs can be traced to the era before World War II and the first cooperative health care models.

By 1929, a number of western cities and rural communities had formed health care cooperatives centered on the practice of a small group of physicians (Tufts Managed Care Institute, 1998). During the 1930s and 1940s, this movement spread along with a concept of prepaid health care. For example, workers on the construction of large
infrastructure projects like the Hoover Dam project had 5 cents withheld from every dollar they were paid to cover medical expenses, including those from on-the-job injuries. These prepaid plans later became the health maintenance organizations (HMOs) of today. The late 1940s and 1950s saw this movement take another direction with the establishment of nonprofit group health insurance programs. At first, the American Medical Association opposed these efforts to make physicians employees of sponsoring organizations.

A great shift occurred in July of 1965 under the leadership of President Lyndon Johnson with the creation of Medicare and Medicaid programs within the Social Security Administration. Medicare and Medicaid began to include psychotherapy as covered services in 1990.¹

Current Status

Paralleling Medicare and Medicaid’s payments for psychological services, medical insurance companies also started providing payment for psychological therapies for covered individuals. With all third-party payment systems for psychotherapy, there is a need to follow treatment guidelines and accept negotiated payment levels. Also, providers of mental health care need to be able to document the effectiveness of their therapies and account for their activities.

Practitioners today work in an environment in which the mandates of health management systems and health insurers, led by the policies of Medicare and Medicaid, prescribe what are and are not covered treatments. To qualify for reimbursement, the therapy must be directed to help what health care managers define as a medically required condition. A clear diagnosis of the patient’s condition must be made and coded in the medical records of the patient. Working within these parameters, the therapist has both the number and the nature of therapy sessions, which must use an approved approach to treatment, specified.

Health care providers have developed codes for organizing and billing for psychological services known as Current Procedural Terminology (CPT).

Applications from the Literature

CPT Codes for Psychological Services

Note: The American Medical Association maintains a web page with all the per-hour reimbursement levels for the various states and regions of the United States: https://ocm.ama-assn.org/OCM/CPTRelativeValueSearch.do. Naturally, patients receiving an ethical treatment from a licensed therapist that is not on the list of codes can pay for the treatment from private funds.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90801</td>
<td>Psychological Diagnostic Interview Examination (includes report prep time 90885)</td>
</tr>
<tr>
<td>90802</td>
<td>Interactive Diagnostic Interview (with language interpreter or other mechanisms)</td>
</tr>
<tr>
<td>90816</td>
<td>Individual psychological psychotherapy, 20–30 minutes for Inpatient (Outpatient = 90804)</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90818</td>
<td>Individual psychological psychotherapy, 45–50 minutes for Inpatient (Outpatient = 90806)</td>
</tr>
<tr>
<td>90821</td>
<td>Individual psychological psychotherapy, 75–80 minutes for Inpatient (Outpatient = 90808)</td>
</tr>
<tr>
<td>90847</td>
<td>Family psychotherapy with patient present (90846 without patient present; 90849 multiple-family group psychotherapy)</td>
</tr>
<tr>
<td>90853</td>
<td>Group psychotherapy</td>
</tr>
<tr>
<td>96101</td>
<td>Psychological testing, interpretation and reporting per hour by a psychologist (per hour)</td>
</tr>
<tr>
<td>96102</td>
<td>Psychological testing per hour by a technician (per hour)</td>
</tr>
<tr>
<td>96103</td>
<td>Psychological testing by a computer, including time for the psychologist's interpretation and reporting (per hour)</td>
</tr>
<tr>
<td>96105</td>
<td>Assessment of Aphasia</td>
</tr>
<tr>
<td>96111</td>
<td>Developmental Testing, Extended</td>
</tr>
<tr>
<td>96115</td>
<td>Neurobehavioral Status Exam (per hour)</td>
</tr>
<tr>
<td>96116</td>
<td>Chart Review, Scoring, and Interpretation of Instruments, Note Writing</td>
</tr>
<tr>
<td>96118</td>
<td>Neuropsychological testing, interpretation and reporting per hour by a psychologist</td>
</tr>
<tr>
<td>96119</td>
<td>Neuropsychological testing per hour by a technician</td>
</tr>
<tr>
<td>96120</td>
<td>Neuropsychological testing by a computer, including time for the psychologist's interpretation and reporting</td>
</tr>
<tr>
<td>96150</td>
<td>Health &amp; Behavioral Assessment—Initial</td>
</tr>
<tr>
<td>96151</td>
<td>Reassessment</td>
</tr>
<tr>
<td>96152</td>
<td>Health &amp; Behavior Intervention—Individual</td>
</tr>
<tr>
<td>96153</td>
<td>Health &amp; Behavior Intervention—Group</td>
</tr>
<tr>
<td>96154</td>
<td>Health &amp; Behavior Intervention—Family with Patient</td>
</tr>
<tr>
<td>96155</td>
<td>Health &amp; Behavior Intervention—Family without Patient</td>
</tr>
<tr>
<td>97770</td>
<td>Cognitive Rehabilitation</td>
</tr>
</tbody>
</table>

When a therapist disagrees with the decision of a third-party payer, he or she must be ready to prove, with current research, what the best standard for care is for the client and what therapies are most effective for achieving the treatment goals.

**RESEARCH SKILL REQUIREMENTS IN PROFESSIONAL STANDARDS**

Professional societies exist to provide a framework for highly educated individuals employed in a given occupation to maintain control and provide direction for the practice of others in that occupation. This includes setting standards for professional practice and establishing requirements for those entering the profession. The professional society takes responsibility for ensuring the efficacy of practice by its members while providing for the protection of the interests of the general public. This results in the public granting privileges and certain powers to members of the profession, including the power to receive a professional license from the state.

**American School Counselor Association (ASCA)**

In 2012, the ASCA published the third edition of its *National Model: A Framework for School Counseling Programs*. In this highly prescriptive framework, the ASCA has taken a new direction in defining skills that school counselors must bring to their professional positions. One large section of this reformed document specifies that school counselors have certain research skills.

**Applications from the Literature**

**Specific School Counselor Competencies**

*Note:* These research and evaluation competencies are a portion of the full statement of competencies for school counselors by the American School Counselor Association.

**Skills and Attitudes**

**IV-B:** An effective school counselor is able to accomplish measurable objectives demonstrating the following abilities and skills:

**IV-B-2d:** Reviews school data, school counseling program audits, and school counseling program goals with the [advisory] council.

**IV-B-3:** Collects, analyzes, and interprets relevant data, including process, perception, and outcome data, to monitor and improve student behavior and achievement.

**IV-B-3a:** Analyzes, synthesizes, and disaggregates data to examine student outcomes and to identify and implement interventions as needed.

*(Continued)*
(Continued)

IV-B-3b: Uses data to identify policies, practices, and procedures leading to success, as well as systemic barriers and areas of weakness.

IV-B-3c: Uses student data to demonstrate a need for systemic change in areas such as course enrollment patterns; equity and access; and the achievement, opportunity, and information gap.

IV-B-3d: Understands and uses data to establish goals and activities to close the achievement, opportunity, and information gap.

IV-B-3e: Knows how to use and analyze data to evaluate the school counseling program, research activity outcomes, and identify gaps between and among different groups of students.

IV-B-3f: Uses school data to identify and assist individual students who do not perform at grade level and do not have opportunities and resources to be successful in school.

IV-B-3g: Knows and understands theoretical and historical basis for assessment techniques.

IV-B-6: Designs and implements action plans aligning with school and school counseling program goals.

Action Plans: For every desired competency, there must be a plan outlining how the desired result will be achieved. Each plan should contain:

1. competencies addressed
2. description of the activity
3. data driving the decision to address the competency
4. timeline in which the activity is to be completed
5. who is responsible for delivery
6. means of evaluating student success
7. expected results for students

IV-B-6a: Uses appropriate academic and behavioral data to develop school counseling core curriculum and closing-the-gap action plan and determines appropriate students for the target group or interventions.

IV-B-6f: Identifies data collection strategies to gather process, perception, and outcome data.

Knowledge

V-A: School counselors should articulate and demonstrate an understanding of:

V-A-1: Basic concepts of results-based school counseling and accountability issues
V-A-2: Basic research and statistical concepts to read and conduct research
V-A-3: Using data to evaluate program effectiveness and to determine program needs
V-A-4: Program audits and results reports

Abilities and Skills

V-B: The effective school counselor is able to accomplish measurable objectives demonstrating the following abilities and skills:
School Counselor Performance Standards

The school counselor’s performance evaluation contains basic standards of practice expected of school counselors implementing a school counseling program. These performance standards provide both a basis for counselor evaluation and a means for counselor self-evaluation (ASCA, 2012)

Program Audit

The primary purpose for school counselors to collect information is to guide future action within the program and to improve future results for students. To meet this goal, the ASCA asks all school counselors to conduct an audit of their counseling program using a form published by the association: http://www.lehman.edu/deanedu/share/pdf/SSE_Program_Audit.pdf.

Association of State and Provincial Psychology Boards (ASPPB)

This central organization administers a widely used licensing examination in the United States and Canada, the Examination for Professional Practice in Psychology (EPPP). Most

states and Canadian provinces set cutoff scores students must achieve on this test to qualify for a license to practice. This test has eight sections, two of which are focused on issues of research, statistics, and assessment. Those two sections account for 22% of all items on the EPPP (ASPPB, 2011).

### Canadian Counselling and Psychotherapy Association (CCPA)

The CCPA requires the following components be included in the curriculum of all Canadian universities providing graduate education in counseling (CCPA, 2003). Course material involves the use of relevant research data by faculty and students, including the following:

**Assessment Processes, including**

- Knowledge related to the evolution of the development of individual and group assessment instruments and processes.
- Knowledge of basic concepts of measurement theory, including reliability and validity and related statistical concepts.
- Knowledge and the ability to use a variety of assessment approaches, including standardized and non-standardized instruments, computer-based approaches, observational methods, etc.
- An understanding of the influences of issues of diversity regarding appraisal.
- An ability to appropriately select, apply, and interpret appraisal techniques and instruments within counselling and consultation processes.
- Ethical and legal issues related to assessment.

**Research Methods, including**

- Knowledge of basic principles of qualitative and quantitative research design, along with related processes of data analysis.
- An understanding of challenges involved in conducting counselling research.
- Knowledge of the influence of issues of diversity related to conducting research.
- Legal and ethical issues involved in research.

Program Evaluation, including an understanding of how to conduct needs assessments, specify program objectives and evaluate the impact of counselling programs. (CCPA, 2003, § III.B)

### Commission on Accreditation for Marriage and Family Therapy Education (COAMFTE) of the American Association of Marriage and Family Therapy (AAMFT)

COAMFTE accreditation standards provide the following requirements for graduate programs preparing marriage and family therapists: a curriculum of graduate education including significant material on research in couples therapy. Graduate study will provide a focus on research methodology, data analysis, and the evaluation of research.
The content of the graduate curriculum will also include quantitative and qualitative research and their methods (COAMFTE, 2005).

**Council on Rehabilitation Education (CORE)**

New program standards have set the following requirements (areas of knowledge) for graduate programs in rehabilitation counseling: basic statistics and psychometric concepts, an understanding of research methodology and relevant statistics, and basic research methods involving the interpretation of quantitative and qualitative research articles in rehabilitation and related fields. Graduate programs must also teach students to apply research literature to practice (e.g., to choose appropriate interventions to plan assessments [CORE, 2011]).

**Council for Accreditation of Counseling and Related Educational Programs (CACREP)**

The CACREP section “Research and Program Evaluation” mandates that graduate programs require studies that provide an understanding of research methods, statistical analysis, needs assessment, and program evaluation. These are to include the importance of research in advancing the counseling profession, the use of research to inform evidence-based practice, and ethical and culturally relevant strategies for interpreting data (CACREP, 2009).

**International Association of Counseling Services Inc. (IACS)**

This accrediting body for campus-based counseling centers adopted a new set of standards for counseling centers seeking accreditation in 2005 (IACS, 2005). Two of those standards address research and evaluation skills needed by professional employees and interns of university-based centers.

Research: An integral responsibility of the counseling service is to conduct ongoing evaluation and accountability research, to determine the effectiveness of its services, and to improve the quality of services.

Services must adhere to the following:

a) Counseling services must abide by professional ethical standards as well as expectations developed by university groups responsible for overseeing research. Ultimate responsibility for the establishment and maintenance of accepted ethical practices shall reside with the individual researcher and the Director of the counseling service.

b) The counseling service should contribute to studies of student characteristics and follow-up studies of student progress in various programs.

c) Counseling services should be involved with students and faculty who wish to conduct individual research on student characteristics or on the influence of
specific student development programs. Such activities must be in compliance with appropriate professional ethical standards as well as institutional research board requirements.

d) The counseling service should make every effort to contribute to the fields of counseling, psychology, and other relevant professions (e.g., student personnel services, social work, etc.) through research and other scholarly endeavors.

Program Evaluation: There must be a regular review of the counseling service based on data from center evaluation efforts. When possible it is desirable to include comparative data from other institutions in the evaluation process. (IACS, 2005, p. 5)

INFORMED RESEARCH CONSUMERS

“It is, I think, particularly in periods of acknowledged crisis that scientists have turned to philosophical analysis as a device for unlocking the riddles of their field. Scientists have not generally needed or wanted to be philosophers.”

Thomas Samuel Kuhn

Research in Counseling and Related Professions

In 1776, our revolutionary forefathers held certain “truths to be self-evident.” Unfortunately for those who had to engage in an 8-year war for independence, not everyone in Great Britain saw America’s “truths” as being all that self-evident. What is evident is that what each of us knows, values, and believes may not be the same.

For example, many of us were taught and believe that our planet earth is 4.55 billion years old (Dalrymple, 1991). And that all matter is composed of atoms (Dalton, 1808). Yet, we were not present when the earth was formed, and we have never seen an atom. The implication is that much of what we “know to be true” is what we have read or been taught and is simply our assumed knowledge. This type of knowledge is information generally agreed upon by others.

Empiricism, with its reliance on sensory experience and measurement, is another way to establish what we know. The difficulty with pure empiricism is that it involves actually seeing and recording what happened, operations not readily available for most occasions (Leob, 1981).

In the mental health sciences, the overarching effort is to expand on what is generally agreed upon and to push back the frontiers and limitations of the conventional. In mental health professions, this effort takes many forms. It can be argued that all decisions about the direction of an intervention or treatment with a client are made using a form of research. The practitioner-researcher evaluates the information the client and others provide. Next, he or she analyzes the meaning of those data and decides on a course of action. If the analysis is made using the therapist’s interpretative skill, the focus of the effort is qualitative. However, if the analysis is based on numerical data and employs exact probabilities, it is quantitative. After either type of analysis, the therapist helps the client gain self-awareness and better resolve his or her problems. Finally, the practitioner-researcher
takes careful note of the outcome of his or her efforts and evaluates what has occurred. From the evaluative summaries of outcomes, practitioner-researchers can meet the reporting requirements of most managed health care or third-party fee-for-service insurance programs.

Why Become a Practitioner-Researcher?

There are several reasons for graduate students in one of the counseling professions to be educated as practitioner-researchers. These include the following:

1. Professional accountability
2. Ability to meet the needs of clients
3. Literacy in one’s own field
4. Professional development and improvement
5. Professional empowerment providing the ability to influence the profession
6. Ability to meet the standards of professional societies and demonstrate research knowledge and skills on licensing and certifying examinations (National Board of Certified Counselors, 2012; National Board of Professional Psychology, 2012).

Accountability

For the past 3 decades, the major professional societies have worked to make our fields true professions, requiring state licensure and having the ability to receive third-party payment for services (Virginia Association of Clinical Counselors, 2011). By being part of a profession, practitioner-researchers are viewed by the public as having expertise acquired by advanced education and careful training. A related public assumption is that members of a profession share a common set of values and ethics and work from a defined core of knowledge.

These public perceptions of counselors and other mental health professionals have been accompanied by certain privileges, including the control of titles and a limitation of who may practice. It has also made third-party payment by managed health care agencies possible. Third-party payment for services requires that practitioners provide a diagnosis and a plan for treatment that fits within the managed health care system’s guidelines, and third-party agencies require all treatments to be documented by evidence as to their efficacy.

In a very real sense, accountability in counseling and other mental health professions follows the money. This need for documentation and accountability is true not only to be reimbursed in a managed care system but also from public sources. For example, consider the growth in the number of older and or disabled adults qualified for Medicare and the inclusion of professional counseling and clinical psychology as components of Medicare health plans. For counselors to receive reimbursement, they must provide documentation of the value of services clients are receiving as well as the need for, and the appropriateness of, the interventions and/or therapy (Centers for Medicare and Medicaid Services, 2012;
SECTION I: USING AND VALUING COUNSELING RESEARCH

Photo 1.1  Carl Rogers

Henry J. Kaiser Family Foundation, 2011). This evidence-based proof of the effectiveness of interventions requires that practitioners be competent consumers of research and knowledgeable about research methods. Effectiveness documentation also requires the therapist to be competent in data management, analysis, and presentation.

The idea of basing decisions about treatment effectiveness on research evidence is as old as counseling and psychology. An enormous amount of behaviorally focused scientific literature supports behavior modification therapies. This literature began in American journals with the writings of John Watson (1913). Behavioral approaches for mental health interventions and treatment are easily adapted to quantitative data collection and reporting and are widely employed in clinics and practitioners’ offices today.

Even Carl Rogers once proposed that research should be conducted as to the true value of client-centered therapies (Association for Humanistic Psychology, n.d.). Contemporary counseling research journals regularly report on the effectiveness of interventions and other approaches for the provision of mental health care.

The need for accountability has forced a number of therapists to modify their approach for treatment. Much of what made up the “person-centered counseling” of Carl Rogers and his followers has been minimized in favor of what are considered more efficient and cost-effective approaches for providing mental health care (Harris, 2011; Whitbourne, 2011).

Data-Based Problem Solving

The second factor moving practitioners to become researchers is the need to assure ourselves that we have based our clinical decisions on the best possible evidence and that we have built in assessments of the success of our efforts.

In our new era of accountability, therapeutic approaches or procedures employed by practitioner-researchers should be selected because they are efficient, practical, and highly effective. This requires that treatment goals be set based on evidence. The term applied to this approach is data-based decision making. By this approach, diagnostic evidence is provided by the client and collected through a careful review of all that is known about the client’s circumstances.

CASE IN POINT  1.1

During the 21st century, a new clinical education and service delivery approach for counselors in training has been adopted in a number of graduate programs. Central to this new approach is a formative evaluation and feedback system. The model assumes that there are differences in therapists’ abilities. These differences in effectiveness become apparent early in the training
process. It also assumes that beginning therapists performing poorly can improve when they learn to integrate client feedback into their work (Sparks, Kisler, Adams, & Blumen, 2011). Feedback provided from the client is at the heart of a committed alliance that nascent clinicians form with each individual they are helping. The feedback is provided in the form of one of two postsession measures, the Outcome Rating Scale (ORS; S. D. Miller, Duncan, Brown, Sparks, & Claud, 2003) and the Child Outcome Rating Scale (CORS; Duncan, Sparks, Miller, Bohanske, & Claud, 2006). In addition, the process of feedback involves the use of a semantic differential scale, the Session Rating Scale (SRS; S. D. Miller & Duncan, 2000). Items on this measure typically take the following form:

Please Place a Check Mark (✓) on the Line Nearest to How You Feel About Today's Session

<table>
<thead>
<tr>
<th>My therapist does not value my concerns</th>
<th>My therapist respects &amp; understands my concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel like I am being lectured to</td>
<td>My therapist listens to me</td>
</tr>
</tbody>
</table>

Statistical software is available that uses the outcome data from treatment sessions to track individual client progress while providing guidance to the developing therapist. One package that supports client-directed therapy is provided by Barry L. Duncan and his colleagues at the Heart & Soul of Change Project (http://heartandsoulofchange.com/).

Systems Evaluation

Finally, all clinics and practices, including the programs provided by school counselors, must be periodically evaluated with an eye to improvement. These evaluations are mandated by funding agencies and are built into virtually all applications for grants and subventions. They are also specified by the American School Counselor Association (2012). Most states require school districts to evaluate their system and file a strategic plan for improvement on a regular basis with the state's education secretary. These evaluations include close reviews of the school's counseling programs.

In Summation

The practitioner-researcher is a therapist empowered by the skills and knowledge base needed to be an able consumer of researcher. This empowerment makes it possible for the practitioner-researcher to assume a leading role in clinical practice or other therapeutic settings. It also allows the practitioner-researcher to serve as a valued consultant to his or her peers. For example, it is possible for the practitioner-researcher to assist teams of peers in developing grants or subventions for agency funding, as well as initiate new directions for programs and activities.
GETTING STARTED AS A PRACTITIONER-RESEARCHER

The public’s perception of researchers has been badly distorted by many factors, including, among others, science fiction films and books, politicians who oppose the findings of science, and the seeming inability of scientists to agree upon a final single answer to questions. Adding to the public’s confusion are the complex jargon used by some scholars and the seemingly impenetrable and undecipherable level of mathematics and other equations typically employed by quantitatively focused researchers.

Being a scientist is part of the fantasy life of many children below high school age (see Case in Point 1.2). During high school, however, romantic notions about science bump into the reality of learning scientific principles. All too many students are turned off during high school to all science and scientific scholarship. As undergraduates, too few students elect programs of study rich in science and mathematics. Counseling and psychology professional associations are addressing this unfortunate situation with new standards.

CASE IN POINT 1.2

A child I watched grow up pestered his parents and maternal grandmother (with whom the family was living) for a science kit. He knew he wanted to become a real scientist someday and wanted to get an early start. He became pestiferous until his parents bought a toy chemistry set. With these materials, he could visualize himself in a real laboratory making important discoveries. Unfortunately, he had no direction or goal, but that did not stop him from mixing various reagents to see what would happen. Today, he can look back on that year and know that those pseudo-experiments, while enthusiastically pursued, were not science but a form of symbolic child’s play.

Philosophical Foundation for Counseling Research

No single orthodox approach or methodology is employed by practitioner-researchers engaged in the production and consumption of research in counseling. This reflects the existence in counseling and the related mental health professions of unresolved, philosophical issues. Philosophy provides a framework for doing research and a perspective for consumers of research. Unresolved issues lead researchers to adopt different points of view about the nature of knowledge and how reality is defined. Diverse perspectives have led to varying ways of identifying research questions and the development of different research tools for answering those questions. Yet the bottom line for each of the major philosophical approaches to research is answering questions about and improving the human condition and the practice of mental health care.

Empirical (Quantitative) Research in Human Services

What psychologists once considered the central set of beliefs at the core of psychology was established in the laboratories of Wilhelm Wundt in Germany at Leipzig
University (Ayer, 1952). From 1878 to World War I, Wundt chaired the dissertation research projects of 160 young psychologists from all over the world. These graduates of Leipzig set the direction of psychological science throughout Europe and North America (Farr, 1983).

The approach of Wundt was highly empirical and was based on the model for human understanding and learning during the 18th-century Enlightenment (Hume, 1748/1961). Wundt aligned the emerging discipline of psychology with the natural and physical sciences, and he adopted many of the emerging statistical methods being developed in other sciences. Through his graduate students, Wundt’s influence spread to the universities of the United States, where the philosophy of logical positivism and the use of empirical methods quickly came to dominate American psychology.

A New Research Paradigm

A shift away from this empirical paradigm was driven by another German force in psychology. In Vienna during the late 19th century, the field of psychoanalysis began as a branch of neurology. Its independent influence soon spread throughout European universities. The primary centers for psychoanalytical training in the 1920s were Berlin and Vienna. The rise of German fascism in the 1920s and 1930s and the subsequent formation of a Nazi-dominated government in Germany in 1933 forced many psychoanalytically trained therapists to escape continental Europe and emigrate to Great Britain and the United States.

These German and Austrian intellectuals had a major impact on numerous American psychologists and therapists (Kramer, 1995). For example, the neo-Freudian, Otto Rank, had a profound influence on Carl Rogers. Rogers was already well educated in empirical sciences and psychological testing when he met Otto Rank. Rogers saw in Rank’s model for social work therapy a totally new approach that counseling psychologists could employ in forming therapeutic helping relationships. Rogers’s approach, client-centered counseling, was initially presented during a professional meeting in 1948. What Carl Rogers proposed was a truly humanistic approach to counseling (Rogers, 1951).

Rogers also held several meetings with Abraham Maslow and other humanistic and phenomenologically oriented psychologists at a state park in Michigan in the 1950s. (See Chapter 5 for a discussion of phenomenology.) From these discussions emerged a new organization. In 1961, these psychologists created the Association for Humanistic Psychology with its own journal, the *Journal of Humanistic Psychology* (Aanstoos, Serlin, & Greening, 2000). Ten years later, the American Psychological Association recognized the field of humanistic psychology and elevated it to divisional status as Division 32.

For the new discipline of humanistic psychology to grow, a new approach to conceptualizing research was needed. This new conceptualization became part of a worldview or paradigm that adopted interpretative research methods. These methods were first refined in the 1920s by anthropologists and then by sociologists who followed the anti-positivist movement of Max Weber. These humanistic psychologists deployed their research activities and data-gathering efforts away from the university laboratory. Such
postpositive researchers, the antipositivists, brought their research to field settings where the individuals being studied lived and worked. The emerging collection of new data-gathering techniques based on fieldwork and focused on individuals was central to establishing this new direction in research.

These emerging research methods have been refined and now are used with one of several approaches for analysis and theory building. Collectively, these methods for data collection and the new methodologies for data analysis became known as qualitative research (Guba & Lincoln, 2005).

Contemporary philosophers providing the foundation for the new worldview have asserted that it is never possible to understand and describe a single universal reality. The postpositivists hold that all we believe to be true is evolving and can never provide a long-enduring absolute truism, only an approximation (Kuhn, 1996). This position is central to the interpretative approach to research and the worldview of those employing qualitative approaches to research.

Third Research Paradigm

More recently, another conceptual shift has been defining a third, highly pragmatic paradigm. This new direction began with mandates for standards-based assessment and for accountability of those in the helping professions. The public demand for accountability is one product of the rising cost of service delivery. Use of public funds to support therapy programs combined with easy access to data about professional outcomes and costs make accountability both a necessity and feasible. These cost data are now accessible to the media, politicians, and the general public (Ganapathy, 2004).

This third research paradigm employs both major research paradigms: empiricism and phenomenology. They are combined into a highly pragmatic approach described as mixed-method research (Johnson, Onwuegbuzie, & Turner, 2007). (The methods and models of this third research paradigm are described in Chapter 16.)

Background Knowledge

The most effective practitioners are comfortable with the scientific literature in their field and develop a personal reading program focused on the literature of the mental health professions. A good rule of thumb is to invest between 60 and 90 minutes a week on professional reading and development. Once in a professional position, the practitioner will have many opportunities to identify areas in which he or she needs more knowledge. Such situations may arise when an unusual client presents or when an anomaly occurs.

Practitioner-researchers in private practice will occasionally be stumped by what a client reveals or does during therapy. An effective practitioner-researcher will know how to learn more about the issue and be able to access and understand current research findings on the topic. This capacity can also be applied to conducting action
research from the clinical setting with the clients (see Chapter 6 for a discussion of action research). These background issues and concerns can easily lead to a research problem.

**From Anomaly to Research Problem**

The first step in all research is a felt problem or anomaly that the practitioner-researcher has noted. The next step is an examination of the background literature from previous related studies, followed by a synthesis of that literature to form a problem statement or research question. Subsequent steps relate to data collection and analysis and the development of meaningful conclusions. Research methods and approaches are the core content of this textbook.

**Identifying Researchable Problems**

The practitioner's own professional practice is a good source of researchable ideas. In addition, science builds upon itself, with each new finding becoming the starting point for other research efforts. Therefore, another excellent source of ideas for research is found in the last chapter of most doctoral dissertations, where the author provides a list of possible related ideas needing to be pursued. Ideas are also provided by the authors of the many research papers published in professional journals.

**Applications from the Literature**

**Seven Ideas for Further Research from a Journal Article**

*Note:* This study employed an empirical research design (randomized comparison groups) to investigate whether a simple institutional metacommunication intervention with clients had an effect on the development of a therapeutic alliance between client and counselor. This adjunctive instruction involved inviting therapy clients to take a proactive role in their treatment by encouraging feedback to their therapist about various aspects of the therapy process. In this study, 94 clients were randomly assigned to one of two conditions.

**Discussion:** There were various limitations of this study. First, the results of the present study should be replicated. Even though the sample size in the present study is adequate, this study represents an initial investigation of a potential promising area in psychotherapy research. Second, perhaps the adjunctive instruction prompted clients’ responses that were based on social desirability. This is of concern, but even the group differences of the responses up to 24 sessions as well as “vindictive” clients who benefited from the adjunctive instruction counter this interpretation. If replicated, future studies should examine whether the present findings
can be explained by client and/or therapist process characteristics. Third, future research should examine the impact of the adjunctive instruction on the trajectory of the therapeutic alliance in a therapeutic context other than a university outpatient clinic, where detailed quality management (i.e., precise case formulations, biweekly supervision, or the use of postsession reports) is available. Fourth, the present study does not include an active control group. Alternative adjunctive instructions (i.e., an unstructured phone call as attention control group) should be examined to determine whether there are comparable effects as found in this study. However, if a contrastive control group is designed, potential negative side effects should be considered. Fifth, from a methodological point of view, the analysis of a three-item scale may be adequate with respect to repeated session-by-session measurements using hierarchical linear models. However, the therapeutic alliance could be measured more comprehensively than by a repeated three-item session-by-session scale and could include perspectives other than the clients’. Sixth, further research should examine the role of adjunctive instruction in predicting outcome. Seventh, clinical significance of the present findings should be elaborated more precisely. From a clinical perspective, BPSR scores under 2 (2 = yes, 1 = mostly yes) represent an indication to take a more precise look at the case formulation with two questions: (a) Can the answer can be explained according to the client’s plans/schemata? and (b) Should the therapy/therapist be more responsive on neglected aspects of the case formulation?


Applications from the Literature
Future Research Ideas from a Dissertation

Note: The author selected a qualitative approach to learn about the development of a therapeutic alliance between clients and seven volunteer therapists certified by the Biofeedback Certification Institute of America. The seven were all practicing within a 50-mile radius of the university.

Future Studies: Because of the pilot nature of this study, the questionnaire broadly surveyed several areas lacking within the biofeedback literature. Nonetheless, the study clearly showed the disparity between real practice and written literature on biofeedback. Further, the study highlighted the need for an updated literature examining the integration of biofeedback and talk therapy. As such, future studies should address several topics in detail. Suggestions for areas of study include further research on how clinics integrate biofeedback with talk psychotherapy, including correlations linking treatment success measures to the type of integration used. In addition, studies should investigate whether one’s verbal organization of the treatment alliance indicates a better use of this construct in practice. Research further investigating the treatment alliance in biofeedback and ways in which this differs from solely talk psychotherapy treatment is needed as well.

Providing individual psychotherapy is a highly labor intensive activity. Group design for therapy can help, but the cost of hiring a highly educated licensed professional is still significant. Therapy also requires considerable investment in overhead and support staff. As this book goes to press, the private practice price of all this is in the range of $165 an hour (depending on the practitioner’s level of training and specialization and the location of the office). This figure is discounted by the Medicare/Medicaid contracts as well as by private insurers. The national average paid to licensed psychologists and counselors in 2012 by third parties was $82 per hour. These expenses have ushered in mandates for accountability in counseling and psychotherapy. To be able to document the quality of service being delivered and meet accountability requirements, the professional associations have increased the research and evaluation training required of all new professionals entering the field.

Counselors can avail themselves of research models to answer research questions. These approaches include quantitative methods that encompass empirical research. These methods were derived from the physical sciences and are highly structured. Other approaches are more subjective and employ interpretative approaches to data analysis. These qualitative approaches to research are based on a humanistic paradigm.

In becoming a practitioner-researcher, the young scholar needs to become well-read in the professional journals. By reading journal articles, practitioners can improve their practice skills as well as answer questions that arise when treating individuals. The literature of the profession is also a superb source of inspiration and new research ideas.

### DISCUSSION QUESTIONS

1. Use the Internet to learn the specific Medicare and Medicaid reimbursement rates for several therapeutic interventions paid in different areas in the United States.

2. Examine your graduate program’s application for program approval from CACREP and in particular how the program meets the research standard.

3. Use the library’s database to identify one article of interest to you from the *Qualitative Research Journal* and another from the *Journal of Educational Psychology*. Compare research methods and likely worldviews of the authors of the articles.

### NOTES

1. To prevent the costs of long-term mental health care, particularly the hospitalization of individuals with chronic neurological and psychiatric impairments, from overwhelming the system, caps have been made part of the program. For example, in 1990 psychotherapy was provided with only 50% coverage. Under the Obama administration, the patient’s share of psychotherapy costs was reduced to 20%.
2. Many conservative Christian believers follow and believe the estimate of Dr. John Lightfoot, a 17th-century Anglican clergyman, who pegged the creation of the earth as occurring in the year 4004 BCE.

3. One guiding research philosophy is logical positivism. This philosophy is associated with the empirical approach. An opposing framework for research is seen in psychoanalysis, which draws from the philosophy of “idealism” as developed by Hegel. Later it was neo-Freudian psychoanalysis that influenced the uniquely American concepts of client-centered therapy and humanistic psychology. Humanistic psychology has a framework that includes the existential philosophies of Soren Kierkegaard and Rollo May (May, 1994). Humanistic theories have provided a framework for qualitative research methods. A third approach is pragmatic and less doctrinaire. It sees research methods as tools needed to answer questions of worth and effectiveness. To document effectiveness, the researcher often selects a mix of research methods.

4. The Commonwealth of Virginia was the first state to establish a licensing program for professional counselors in 1975.

5. Rogers followed a complex path toward realizing his professional identity and developing what became known as the third force in therapy (Bugental, 1964). Carl Rogers was raised in a strict home with highly committed Christian parents (Rogers, 1961). His choice for higher education was the Agriculture School of the University of Wisconsin, where he studied biological sciences. Later he decided to do graduate work at Union Theological Seminary in New York City. That also proved to be a false start, and Rogers entered Teachers College of Columbia University, where he studied child development and guidance with Leta Hollingworth (Thompson & Henderson, 2007).

6. Most of these highly educated German and Viennese therapists were Jewish and threatened with death by the anti-Semitic Nazi government. They included Sigmund and Anna Freud, Eric H. Erikson, Otto Rank, Karen Horney, Wilhelm Reich, Erich Fromm, Kurt Lewin, Harry Stack Sullivan, Alfred Adler, Kurt Goldstein, Wolfgang Kohler, Max Wertheimer, Kurt Koffka, and many others.

7. Thomas Kuhn was the originator of the term paradigm shift.

8. In the 1970s, when I was working as a fellow in a rehabilitation hospital that was part of a large university medical center, the hospital billed my clients’ insurers $10 per hour for my time, and my mentor billed at $15 per hour.