

SERIES IN SPECIALTY COMPETENCIES IN PROFESSIONAL PSYCHOLOGY

Specialty Competencies in Cognitive and Behavioral Psychology

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OXFORD

Specialty Competencies in Cognitive and Behavioral Psychology

Series in Specialty Competencies in Professional Psychology

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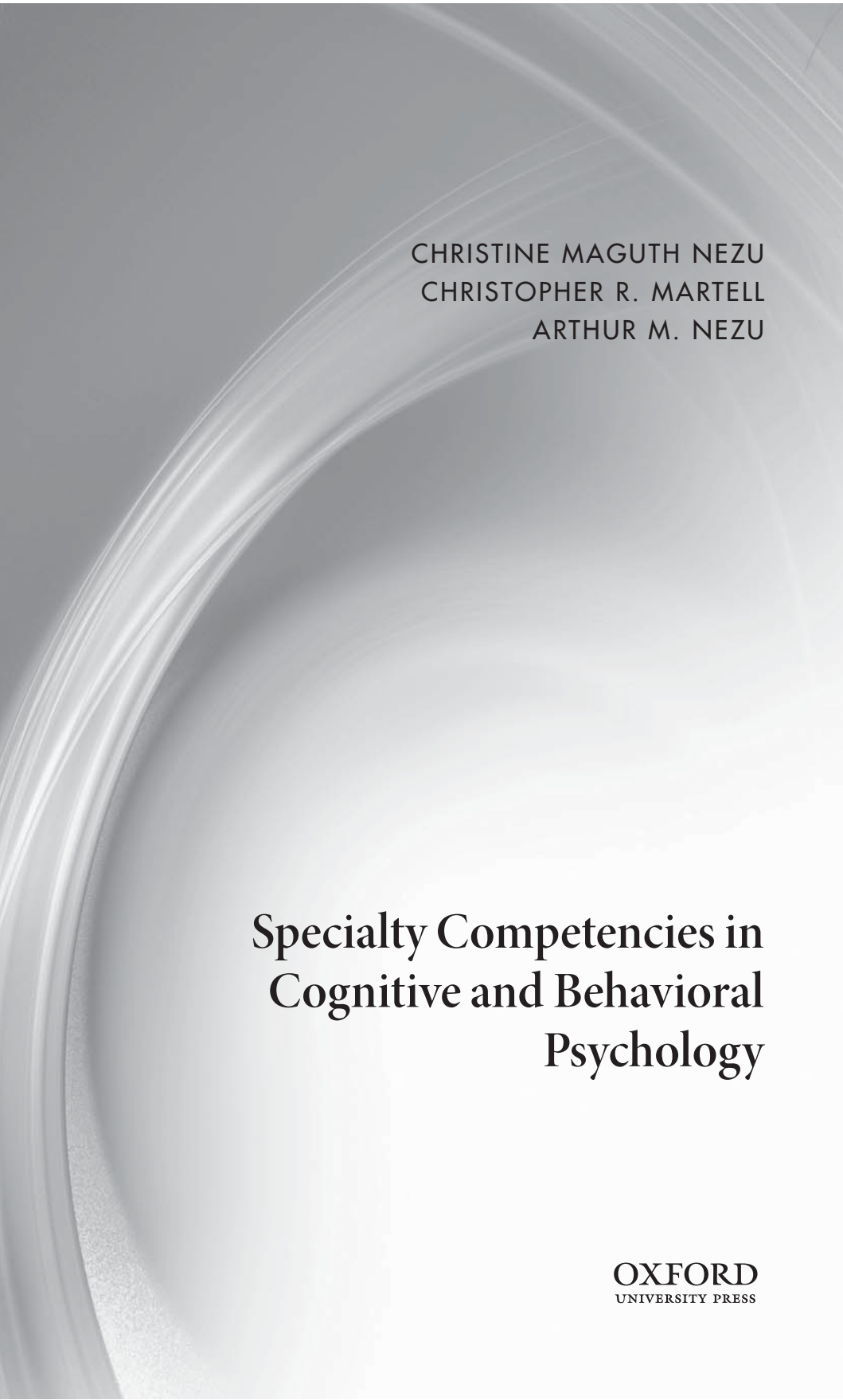
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To the competent and compassionate cognitive and behavioral
specialists who are devoted to easing human
suffering and improving people's lives.

—Christine Maguth Nezu

To my life partner Mark Edward Williams, M.Div., MSW, Ph.D.,
who appreciates my dedication to psychology, my tendency to
agree to too many projects, and who has been there for me to
run ideas across, even in the midst of his own busy life.

—Christopher R. Martell

To the patients who have trusted in our competence
and struggled with the challenge of change.

—Arthur M. Nezu

THE SPECIALTY OF COGNITIVE AND BEHAVIORAL PSYCHOLOGY DEVELOPMENTAL TIMELINE

- 1904 Pavlov wins Nobel Prize for Physiology.
- 1913 Radical behaviorism is launched by Watson.
- 1927 Backward conditioning developed by Mary Cover Jones.
- 1938 Joseph Wolpe develops systematic desensitization treatment based upon reciprocal inhibition.
- 1950–1960 Behavioral psychologists explore the clinical relevance of learning principles in South Africa, the United Kingdom, and the United States.
- 1960–1970 Clinical behavior therapy is established.
- 1962 Albert Ellis develops rational emotive psychotherapy (RET).
- 1969 George Kelly develops cognitive construct theory.
- 1970–1980 Expansion and inclusion of cognitive theories and positive psychology to behavior therapy.
- 1980–1990 Construct of learning expanded to include schemas and implicit learning.
- 1980–1990 Adaptation of Eastern influences of mindful meditation and awareness.
- 1987 American Board of Behavioral Psychology established.
- 1992 American Board of Behavioral Psychology recognized by the American Board of Professional Psychology (ABPP).
- 1990–2000 Advances in neuroscience reveal emotional learning pathways underlying conditioning models.
- 2000 Behavioral psychology recognized by Commission for the Recognition of Specialties and Proficiencies in Professional Psychology (CRSPPP).
- 2000 American Board of Behavioral Psychology adopted its current name, American Board of Cognitive and Behavioral Psychology, to reflect its growth as a specialty in professional psychology.
- 2000 Academy of Cognitive and Behavioral Psychology adopts its new name to reflect its growth as a specialty.
- 2000–present Increasing recognition of the common elements among cognitive behavioral psychotherapies.

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ABOUT THE SERIES IN SPECIALTY COMPETENCIES IN PROFESSIONAL PSYCHOLOGY

This series is intended to describe state-of-the-art functional and foundational competencies in professional psychology across extant and emerging specialty areas. Each book in this series provides a guide to best practices across both core and specialty competencies as defined by a given professional psychology specialty.

The impetus for this series was created by various growing movements in professional psychology during the past 15 years. First, as an applied discipline, psychology is increasingly recognizing the unique and distinct nature among a variety of orientations, modalities, and approaches with regard to professional practice. These specialty areas represent distinct ways of practicing one's profession across various domains of activities that are based on distinct bodies of literature and often addressing differing populations or problems. For example, the American Psychological Association (APA) in 1995 established the Commission on the Recognition of Specialties and Proficiencies in Professional Psychology (CRSPPP) in order to define criteria by which a given specialty could be recognized. The Council of Credentialing Organizations in Professional Psychology (CCOPP), an inter-organizational entity, was formed in reaction to the need to establish criteria and principles regarding the types of training programs related to the education, training, and professional development of individuals seeking such specialization. In addition, the Council on Specialties in Professional Psychology (COS) was formed in 1997, independent of APA, to foster communication among the established specialties, in order to offer a unified position to the public regarding specialty education and training, credentialing, and practice standards across specialty areas.

Simultaneously, efforts to actually define professional competence regarding psychological practice have also been growing significantly. For example, the APA-sponsored Task Force on Assessment of Competence

in Professional Psychology put forth a series of guiding principles for the assessment of competence within professional psychology, based, in part, on a review of competency assessment models developed both within (e.g., Assessment of Competence Workgroup from Competencies Conference; Roberts et al., 2005) and outside (e.g., Accreditation Council for Graduate Medical Education and American Board of Medical Specialties, 2000) the profession of psychology (Kaslow et al., 2007).

Moreover, additional professional organizations in psychology have provided valuable input into this discussion, including various associations primarily interested in the credentialing of professional psychologists, such as the American Board of Professional Psychology (ABPP), the Association of State and Provincial Psychology Boards (ASPBB), and the National Register of Health Service Providers in Psychology. This widespread interest and importance of the issue of competency in professional psychology can be especially appreciated given the attention and collaboration afforded to this effort by international groups, including the Canadian Psychological Association and the International Congress on Licensure, Certification, and Credentialing in Professional Psychology.

Each volume in the series is devoted to a specific specialty and provides a definition, description, and development timeline of that specialty, including its essential and characteristic pattern of activities, as well as its distinctive and unique features. Each set of authors, long-term experts and veterans of a given specialty, were asked to describe that specialty along the lines of both functional and foundational competencies. *Functional competencies* are those common practice activities provided at the specialty level of practice that include, for example, the application of its science base, assessment, intervention, consultation, and where relevant, supervision, management, and teaching. *Foundational competencies* represent core knowledge areas which are integrated and cut across all functional competencies to varying degrees, and dependent upon the specialty, in various ways. These include ethical and legal issues, individual and cultural diversity considerations, interpersonal interactions, and professional identification.

Whereas we realize that each specialty is likely to undergo changes in the future, we wanted to establish a baseline of basic knowledge and principles that comprise a specialty, highlighting both its commonalities with other areas of professional psychology, as well as its distinctiveness. We look forward to seeing the dynamics of such changes, as well as the emergence of new specialties in the future.

In writing this volume, we, in collaboration with our co-author Christopher Martell, sought to meet the challenge of illustrating how competencies within the continually growing specialty of cognitive and behavioral psychology may be defined. With ever expanding scientific research support for the wide range of cognitive and behavioral interventions, more and more doctoral programs in clinical psychology have developed concentrations in this specialty area. As such, we (Nezu, Martell, and Nezu) provide a needed bridge between these evidence-based interventions that have become a hallmark of the specialty and the prominent cognitive, behavioral, and emotional learning theories from which they have been developed. Also of particular note are the chapters that illustrate the unique ethical challenges that may arise for therapists who work from a cognitive and behavioral perspective, as well as those that translate how multicultural and interpersonal competencies specifically apply to the specialty. Lastly, this volume provides a comprehensive overview of how the specialty area has emerged and offers a case formulation methodology as one way to integrate the various aspects of cognitive and behavioral therapies that include applied behavioral analysis, behavior modification, cognitive therapy, and contemporary integrative cognitive behavioral approaches to clinical problems. Those readers interested in obtaining an informed understanding of past influences, extant scientific foundations, knowledge about important professional issues, and an appreciation of the specialty's future directions, will find them all represented well in this single volume.

Arthur M. Nezu
Christine Maguth Nezu

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PART I

History and Background

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Introduction

The converging paths of the applied specialty of cognitive and behavioral psychology can be traced back to the 1950s and the emergence of behaviorism in the United States, the United Kingdom, Canada, and South Africa (Antony & Roemer, 2011). Earlier scientific investigations of learning theory with animal models carried out by Pavlov, Thorndike, Hull, Skinner, and later with human learning by Watson, as well as scores of studies by other experimental psychologists, contributed heavily to the foundations of the specialty. Although the various factors that contribute to cognitive and behavioral psychology's evolution are numerous, the approach was focused on applying a scientific method to understanding and treating psychopathology. As a clinical approach, behavioral psychology was directed toward understanding human behavior, increasing adaptive functioning, and modifying clinical behavior problems based upon the application of theories of learning. An influential event in the development of a behavioral specialty within professional psychology culture was the Boulder Conference on Graduate Education in Clinical Psychology in 1949, which emphasized the concept of scientist-practitioner training in psychology. During this conference and subsequent professional meetings, an initial generation of behavior therapists sought to clinically demonstrate this new and exciting field of applied research, which used learning principles to understand the etiology and maintenance of problems in living and to develop effective treatments for therapeutic change in order to improve people's lives.

In North America, behavioral treatments were heavily drawn from operant learning approaches based upon theories of Skinner (1953) and Hull's

drive reduction theory (1943), whereas the influence of respondent conditioning was evident in the clinical research of Watson (Watson & Raynor, 1920), Jones (1924), and Mowrer (1948). In South Africa, Joseph Wolpe was one of the first individuals to develop treatments based on the concept of reciprocal inhibition, or pairing a previously learned, feared stimuli with a relaxation response, known as systematic desensitization (Wolpe, 1958).

Beginning in the 1950s and 1960s, contributions from cognitive theories such as George Kelly's personal construct theory (1955) and models of information processing significantly expanded the concept of learning to extend far beyond earlier conditioning theories (O'Donohue & Fisher, 2009). Several authors credit Albert Ellis as a major influence regarding the incorporation of cognitive strategies into behavioral therapy (Antony & Roemer, 2011). Ellis, who was influenced by his own training in both conditioning theory and psychoanalysis, developed a treatment that he labeled "rational emotive psychotherapy" (1962).

Contributions to contemporary cognitive and behavioral theory continued to expand regarding the role of cognitive mediators in learning. Individuals who were instrumental to this advancement of the specialty's scope during that time included Donald Meichenbaum (1977), Marvin Goldfried, Thomas D'Zurilla (Goldfried & D'Zurilla, 1971), and Michael Mahoney (1974). In the time period extending from the 1970s to the 1980s, behavioral approaches to treatment incorporated concepts such as Lazarus' multimodal therapy (Lazarus, A., 1973) and Bandura's social learning theory (1976). Finally, Aaron Beck, a psychiatrist, advanced a therapy approach based upon cognitive principles of change (Beck, 1976).

These are just a few examples of the many ways that behavior therapy expanded to include the newly emerging paradigm of cognitive and behavioral psychotherapy. Lazarus (2001) credits Cyril Franks with the actual term *cognitive-behavioral therapy*, which illustrated the zeitgeist during this time period to include cognitive-based approaches to psychotherapy treatment, in addition to the conditioning-based approach that previously had predominated behavioral interventions.

Later, during the 1980s and 1990s, the construct of learning was further expanded to include phenomena such as implicit meaning structures or schemas, through which people react to and interpret their world, often outside conscious awareness (Goldfried, 2003; Young, 1994). The past two decades have produced research that underscores the importance of emotional activation (Gross & Thompson, 2007) as well as mindful awareness of negative affective states (Hayes, Strosahl, & Wilson, 1999; Nezu, Nezu, & D'Zurilla, 2013; Segal, Teasdale, & Williams, 2001; Roemer &

Orsillo, 2002) as critical components of the cognitive-behavioral therapeutic process.

Finally, neuroscientific researchers have provided both animal and human models of learning, using contemporary imaging methods in their research. These studies have aided in the discovery of the presence of specific neural pathways involved in learning experiences with a strong emotional component (LeDoux, 2000). This is a particularly exciting time in the evolution of cognitive and behavioral psychology, because the field is integrating its scientific foundations with more recent findings from brain science and a return to the importance of emotional experience, first put forward by William James (James, 1884), over a century ago. It is also a time when competence in applying cognitive and behavioral interventions within the specialty requires an integrated knowledge of a wide range of physiologic phenomena, neuro-cognitive models, multicultural factors, and theories of emotion with contemporary principles of learning.

Currently, there is an effort among leaders in this specialty to discern the active ingredients that are common to the many interventions that fall under the rubric of cognitive and behavior therapies (see Barlow, Allen, & Choate, 2004; Task Force for Common Language in Psychotherapy Procedures, 2010). This approach is focused on the investigation and understanding of the most important “ingredients” across a wide range of interventions that fall under the cognitive and behavioral rubric. From its beginning as a specialty area of applied psychology, the unifying principle in cognitive and behavioral psychology (and its associated psychotherapy interventions) that has been present throughout its growth is the commitment to a scientific approach. Specifically, the scientific approach is viewed as the method for the identification and discovery of effective assessment methods and treatments aimed at ameliorating human suffering and promoting an increased quality of life.

The Path to Formal Recognition

Cognitive and behavioral psychology was initially recognized as a specialty by the American Board of Professional Psychology (ABPP) in 1992 (originally titled the American Board of Behavioral Psychology when first incorporated in 1987 with support from the Association of Behavior and Cognitive Therapies, which was then known as the Association for Advancement of Behavior Therapy). Later, in 1994, the American Board of Cognitive and Behavioral Psychology (ABCBP) adopted its current name to reflect the growing breadth of the field and to be consistent with similar name

changes by organizations that promoted cognitive and behavioral therapies around the world, including the Association for Behavioral and Cognitive Therapies and the World Congress of Behavioral and Cognitive Therapies. In 2000, the specialty was recognized by the Commission for the Recognition of Specialties and Proficiencies in Professional Psychology (CRSPPP), associated with the American Psychological Association (APA). The commission reviews petitions for specialty recognition within professional psychology and makes recommendations to the APA regarding issues concerning psychology specialties and proficiencies. Additionally, a representative from the specialty of cognitive and behavioral psychology participates in the Council of Specialties (CoS), which is recognized by the APA and the ABPP to meet and consider policies affecting specialization in professional psychology.

Although there is no specific APA division that exclusively represents the specialty of cognitive and behavioral psychology, many specialists in this area are active in APA divisions dedicated to behavioral analysis (APA Division 25), clinical psychology (Division 12, Section III, Society for a Science of Clinical Psychology), and developmental disabilities (Division 33). The post-licensure board certification process is administered by the American Board of Cognitive and Behavioral Psychology, and fellowship membership for board-certified cognitive and behavioral psychologists is offered through the American Academy of Cognitive and Behavioral Psychology. Related multidisciplinary organizations that represent physicians, social workers, and other mental health professionals include the Association for Behavioral and Cognitive Therapies, the Behavior Analyst Certification Board, the Association for Behavior Analysis, and the Academy of Cognitive Therapy. Cognitive-behavioral psychologists are also very involved in the development of assessment and treatment strategies that cross over to other areas of professional psychology specialization, including (but not limited to) clinical, clinical child and adolescent, clinical health, geropsychology, school, organization and business consulting, couple and family, and rehabilitation areas.

Definition and Unique Characteristics of the Specialty

The specialty of cognitive and behavioral psychology emphasizes an experimental-clinical approach regarding the application of behavioral and cognitive sciences to understanding human behavior and developing interventions to enhance the human condition. Cognitive and behavioral psychologists engage in research, education, training, and clinical

practice regarding a wide range of problems and populations. The specialty's distinct focus is twofold: (a) its heavy reliance on empiricism and an evidence-based approach; and (b) its grounding in learning theories, broadly defined, including classical (respondent) learning models, such as associative and single stimulus conditioning, operant learning models, social learning, and information-processing models (American Board of Cognitive and Behavioral Psychology, 2010).

As indicated earlier, although cognitive and behavioral psychology is theoretically rooted in early learning theories and behavior modification, it has evolved over the years and has been informed by an emerging scientific knowledge base in contemporary learning theory, neuro-cognitive research, emotional and cognitive implicit learning models, and information-processing theory, research, and practice.

With regard to education and training, cognitive and behavioral psychology has not been associated with a specific, specialty-affiliated, APA-accredited doctoral program. Over the years, simultaneous to its emergence as a specialty, clinical, school, and counseling psychology training programs have historically included behavioral and cognitive courses, as well as training experiences, such as supervised clinical practicum. These included theories of learning, neuroscience, cognitive psychology, and experimental analyses of behavior. Additionally, courses focused on learning theories were typically included in training programs for education, special education, clinical health, and behavioral economics.

Currently, there are four major subareas of the specialty that share their theoretical foundations in learning theory and a common approach to case conceptualization. These include applied behavior analysis, behavior therapy, cognitive-behavior therapy, and cognitive therapy. Additionally, there are many evidence-based therapeutic interventions and systems, as well as individual therapy techniques that fall under each subarea. For example, cognitive-behavioral therapy may include therapeutic interventions such as dialectical behavior therapy (DBT; Linehan, 1993) or cognitive-processing therapy (CPT; Resick, Monson, & Chard, 2007); systems of psychotherapy such as problem-solving therapy (PST; D'Zurilla & Nezu, 2007; Nezu, Nezu, & D'Zurilla, 2013) or behavioral activation treatment (BA; Dimidjian, Barrera, Martell, Munoz, & Lewinsohn, 2011; Jacobsen, Martell, & Dimidjian, 2001); and specific therapy techniques such as virtual systematic desensitization (Rothbaum et al., 1995), exposure and response prevention (ERP; Wilhelm & Steketee, 2006), cognitive hypnotherapy (Dowd, 2000), or progressive relaxation training (Bernstein, Borkovec, & Hazlett-Stevens, 2000). Moreover, learning occurs on both a

conscious and non-conscious level of awareness. Applied behavioral analysis may include assessment systems such as functional analysis, or interventions such as token economies, time-out procedures, or differential reinforcement of incompatible behavior (Kazdin, 2000). The construct of “behavior” in the specialty of cognitive and behavioral psychology is very broadly defined to include overt actions, as well as private phenomena, such as cognitions, affect, emotional arousal, and physiological events (Dowd, Chen, & Arnold, 2010). In summary, the definition of cognitive behavior therapy is wide-ranging and has its historic roots in behavior therapy, cognitive therapy, and experimental analysis of behavior, as well as contemporary learning approaches, physiologic psychology, neuro-cognitive models, and research concerning multiculturalism and theories of emotion. The specialty remains focused on clinical problems and clinical solutions associated with learning.

As indicated in the preceding paragraphs, the actual knowledge base subsumed under the rubric of cognitive and behavioral psychology is derived from a wide range of experimental and applied research areas. Specifically, the knowledge core that is common to all four subareas includes the full spectrum of learning theories, theories of human development, biological bases of behavior, neuro-cognitive aspects of behavior, affective aspects of behavior, principles of measurement, ethics, case formulation, clinical decision making, theories of individual differences regarding ethnic and cultural diversity issues, and research methods, including both group and single-subject experimental designs. Cognitive and behavioral psychologists are also concerned with how the various behavioral, cognitive, affective, biological, and social factors interact and impact each other (Dowd, Chen, & Arnold, 2010); they assume a biopsychosocial view of human physical and mental health and illness (Nezu, Nezu, & Rosessler, 2001) and embrace a multicultural perspective.

Cognitive and behavioral psychologists serve a wide range of populations, including children, adolescents, adults, and older adults. Although a focus on individual behavior is a hallmark of the specialty, cognitive and behavioral therapies have been implemented successfully with couples, groups, families, classrooms, and organizations, and in a variety of settings (e.g., homes, schools, clinics, hospitals, workplaces, correctional facilities, communities). More recently, cognitive and behavioral interventions have become available through web-based Internet programs and treatments, as well as through smart phone applications.



Conceptual Foundations and Theories

This chapter will focus on the influence of various conceptual and theoretic factors that represent the core foundations of the specialty. These foundations include the major learning theories that are traditionally invoked when describing cognitive and behavioral conceptualizations of a particular clinical problem or disorder (Nezu, Nezu, & Lombardo, 2006) and extend to the recent integration of contemporary learning theory with findings from developmental and interpersonal contexts (Mahoney & Lyddon, 1988; Guidano & Liotti, 1983; Meichenbaum, 1977; Young, 1994), the neuroscience of emotional, cognitive, and non-conscious learning (Damasio, 1999; LeDoux, 2000; Murphy & Zajonc, 1993; Davidson & Begley, 2012), as well as alternative philosophical, cultural, and spiritual traditions that impact an individual's learning experience (Hays, 2009; Nezu & Nezu, 2003). These areas include the following broad categories: (a) associative and single stimulus learning (also termed *respondent*, *classical*, or *Pavlovian conditioning*); (b) instrumental learning (also termed *operant conditioning* or *Skinnerian conditioning*); (c) two-factor theory, d) imitative learning (also termed *modeling* or *social learning theory*); (e) information-processing theories (including implicit and non-conscious information processing), and (f) theories of emotion. Table 2.1 provides a brief summary of the major theories.

Associative Learning

Learning by association, or the pairing of two events, can be traced back to early experiments in classical conditioning. Classical conditioning, also