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CHAPTER 1

Introduction to Biopsychosocial Assessment in Clinical Health Psychology

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Over the past 30 years, clinical health psychology has been one of the fastest growing specialty areas of psychology (Belar & Deardorff, 1995, 2009). A number of terms have been used previously to describe the clinical health psychology specialty area, including psychosomatic medicine (Lipowski, Lipsitt, & Whybrow, 1977), behavioral medicine (Schwartz & Weiss, 1978), behavioral health (Matarazzo, 1980), medical psychology (Prokop & Bradley, 1981), behavioral health psychology (Matarazzo, Weiss, Herd, Miller, & Weiss, 1984), and health psychology (Stone et al., 1987). The term "clinical health psychology" was initially archived by the American Psychological Association in 1997 and is described as the application of "scientific knowledge of the interrelationships among behavioral, emotional, cognitive, social, and biological components in health and disease to the promotion and maintenance of health" (as cited in Belar & Deardorff, 2009, p. 5).

Most specialization training for psychologists comes at the postdoctoral level. Over the past two decades, clinical health psychology has been one of the most popular specialty areas for postdoctoral training. Of the 154 postdoctoral fellowship programs found in an online search of the Association of Psychology Postdoctoral and Internship Centers directory (Association of Psychology Postdoctoral and Internship Centers [APPIC], 2013), 102 programs (66%) provide specialty training in health psychology.

Another measure of the growth of clinical health psychology is the number of psychologists employed by medical schools. In 1953, a total of 255 psychologists worked at American medical schools (Mensh, 1953). In 2003, a Medical School/Academic Medical Center Psychologists Employment Survey was conducted by the American Psychological Association's Research Office and the Association of Medical School Psychologists' Executive Committee. This survey indicated that the number of psychologists working in academic medical centers had grown to 2,926 (Pate & Kohout, 2004). A more recent survey has not been conducted since 2003, but it has been estimated that the number of psychologists in medical schools continued to increase at a similar rate and reached 4,788 by 2007 (Robiner, Dixon, Miner, & Hong, 2014). Another way to measure the growth of clinical health psychology is by the average number of psychologists at each academic medical center. The average number of psychologists employed by individual academic medical centers has also grown from 2 in the 1950s to 28 in the 1990s (Sheridan, 1999).

A similar rapid growth in clinical health psychologists has occurred in other clinical and research settings. More psychologists are interacting with the medical community to provide clinical services and to conduct research. A plethora of resources have been developed for psychologists to use as references for the assessment and treatment of the most common psychological disorders (e.g., depression, anxiety, couple distress) seen in behavioral health clinics. However, clinical health psychologists are faced with not only addressing traditional behavioral health problems but also understanding how those problems interact with a breadth of medical problems. Clinical health psychologists must work to overcome the mind–body dualism, originally described by Descartes, which continues to be a common way of conceptualizing clinical cases in many medical settings. Rather than attempting to separate contributions of the "mind" versus the "body," which is the goal of many traditional psychological assessments, evidence-based assessments must focus on the interactions among the individual, the disease, and the environment (Belar & Deardorff, 1995, 2009).

The interrelationships of these components are the hallmark feature of the biopsychosocial model. First described by Engel (1977), the biopsychosocial model was initially proposed as a challenge to biomedicine to develop a new medical model for conceptualizing health and illness. Over the past four decades, this model has not only revolutionized the practice of medicine but has also provided the theoretical foundation for clinical health psychology as a specialty area within psychology. A blueprint to address education and training guidelines for the professional practice of psychology in health care settings was recently published by the Health Service Psychology Education Collaborative (2013). This was an interorganizational effort including the American Psychological Association, the Council of Graduate Departments of Psychology, and the Council of Chairs of Training Councils. The blueprint included a statement of core competencies for clinical health psychologists. As highlighted in this blueprint, clinical health psychology may be the one specialty area within psychology that best exemplifies the use of a biopsychosocial approach to assessment and treatment. This chapter provides an overview of biopsychosocial assessment in the field of clinical health psychology.

Domains Included in the Biopsychosocial Model

According to the original definition provided by Engel (1977), the biopsychosocial model refers to biological, psychological, and social domains. Figure 1.1 depicts this basic biopsychosocial model and how biological, psychological, and social factors can influence—and be influenced by—a particular disease, disorder, or illness. For example, cancer can be influenced or caused by a combination of biological, psychological, and social factors. According to the American Cancer Society (2012), cancer is a complex group of diseases with many possible causes, including genetics, lifestyle (e.g., tobacco use, diet, and physical activity), certain types of infections, and environmental exposures to different types of chemicals and radiation. In addition to there being a multitude of potential causes of cancer that can be conceptualized within the domains of the biopsychosocial model, cancer can have an impact on biological, psychological, and social functioning. For example, certain types of cancer can cause pain, weight loss, depression, anxiety, and decreased sexual functioning. The bidirectional influences involved in the biopsychosocial model are important features in the conceptualization of the assessment and treatment of diseases, disorders, and illnesses.

The application of the biopsychosocial model within the field of clinical health psychology, as well as in other disciplines, often includes an expansion of the model beyond the three basic domains. In addition, there is not universal agreement on the specific domains that should be included within an expanded biopsychosocial model. For example, the biological domain can also be referred to or subdivided into physical, physiological, biochemical, nutritional, or genetic domains. The psychological domain is the one most often subdivided by psychologists and can include emotional, affective, cognitive, behavioral, spiritual, and personality domains. The social domain can include environmental, cultural, family, work, and interpersonal domains.

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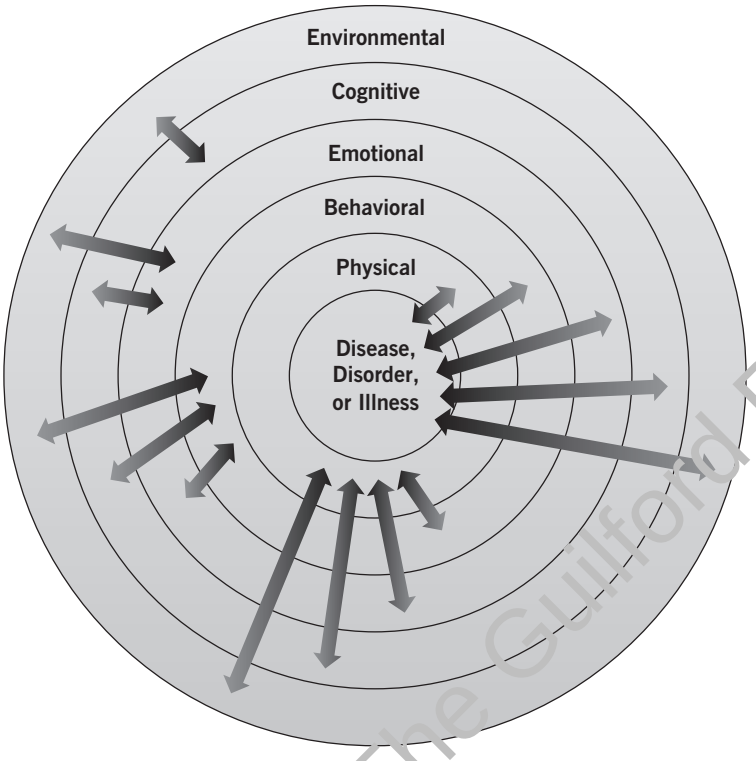

FIGURE 1.1. Domains and bidirectional influences in the expanded biopsychosocial model.

Table 1.1 includes a summary of the primary domains included in the basic as well as expanded versions of the biopsychosocial model. The primary expansion of the model for use by clinical health psychologists is the subdivision of the psychological domain to include behavioral, emotional (or affective), and cognitive domains. For assessments conducted by psychologists, the term "physical domain" is a more useful construct than "biological domain." Finally, "environmental factors," as described by Belar and Deardorff (2009), is a preferred domain description over "social" for clinical health psychologists. The environmental domain expands this construct beyond what is ordinarily thought of as "social" to include factors such as the health care system and even climate. These are known to affect some conditions treated by clinical health psychologists, such as Raynaud's disease and systemic sclerosis (Watson, Robb, Belcher, & Belch, 1999).

TABLE 1.1. Basic and Expanded Versions of the Biopsychosocial Model

Engle (1977)	American Psychological Association (1997)	Belar & Deardorff (2009)
Biological	Biological	Biological or physical
Psychological	Behavioral Emotional Cognitive	Behavioral Affective Cognitive
Social	Social	Environmental

Evidence-Based Approaches to Biopsychosocial Assessment

The primary goal of evidence-based approaches to biopsychosocial assessment is to identify the unique contributions of multiple domains of possible factors to an individual patient's overall physical and psychological health. As mentioned previously,

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traditional clinical assessments and case conceptualizations in medical settings have often tried to determine whether an individual patient's medical condition is more psychological or physical. As a result, clinical cases are often conceptualized on a sliding-scale, bimodal continuum anchored on one side with physical factors and the other side with psychological factors (see Figure 1.2). In contrast, the biopsychosocial approach to psychological assessment presumes that there are varying levels of physical, cognitive, emotional, behavioral, and environmental factors that contribute to the overall clinical assessment and conceptualization of every individual case. Rather than trying to determine whether an individual case is more "psychological" or "physical," multiple domains are seen as contributing varying amounts of influence to the overall biopsychosocial conceptualization of an individual case.

The biopsychosocial model has been a critical factor in helping move clinical health psychologists beyond the traditional mind–body dualism approach to the assessment of patients in medical settings. Evidence-based assessment approaches for many diseases, illnesses, and disorders have embraced the biopsychosocial model of clinical assessment. However, much additional work is needed in the development and validation of biopsychosocial assessment instruments and approaches, and it is our hope that the chapters contained in this volume help spur this development.

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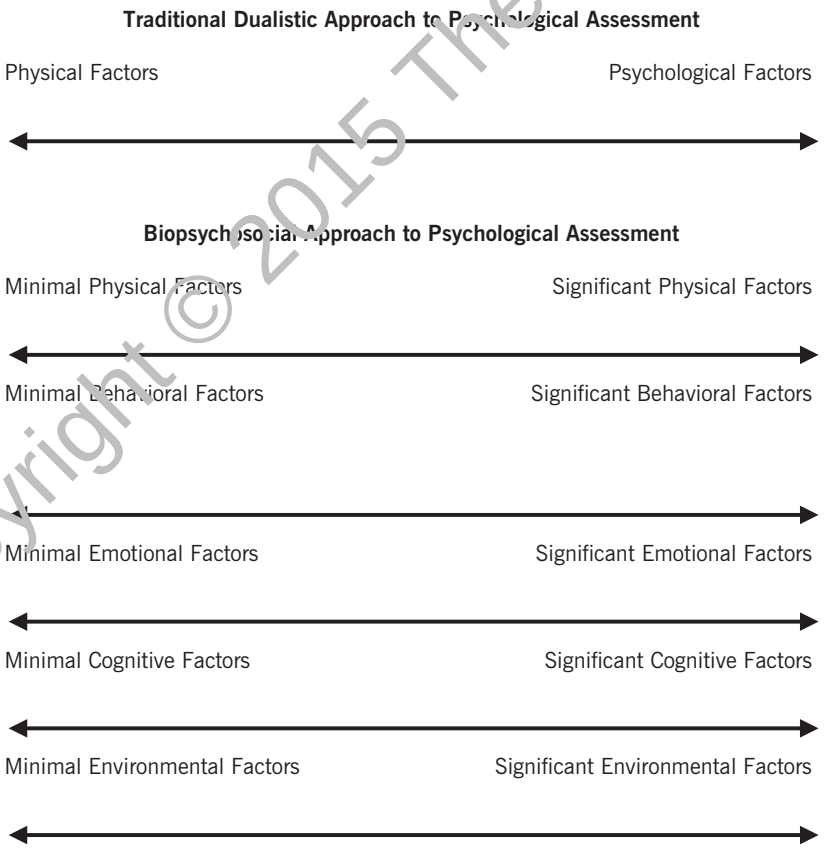

FIGURE 1.2. Traditional versus biopsychosocial approaches to psychological assessment.

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