The Increasing Role of Psychology Health Research and Interventions and a Vision for the Future

Norine G. Johnson
ABCS Psychology Resources

Psychology is on the cusp of becoming a major contributor to the health of the people living in the United States. Over the past 50 years, psychology research and psychologically based interventions and prevention strategies have increasingly influenced the health of people and health care services in the United States. In this article, the authors review briefly the first 40 years of psychology’s development as a health profession. An overview of the accelerating changes for psychological involvement in health since the millennium follows. Then, a vision for the future is presented. This article has as its theoretical base a biopsychosocialcultural model of health that places increasing influence on the role of culture, which includes race, ethnicity, social class, gender, physical ablebodiness, and developmental age.

Keywords: health, biopsychosocial, interventions, prevention, culture

The contributions of psychology are important to the health of the U.S. populace now and in the future. To provide a context for the vision statements regarding psychology and health in the United States, we briefly review the pre-1990s history of psychology and health. The key areas in the expansion of psychology’s role in health following the passing of an American Psychological Association (APA) by-law change in 2001 are presented within the framework of the biopsychosocial model of health. Arguments are made for the expansion of the model to more explicitly include cultural variables. The article ends with five visions for the future of psychology and health.

Review of Psychology and Health Prior to 1990

The potent interaction between health and behavior was recognized for millennia prior to 1900. Then, it was essentially disregarded during the 20th century’s growth of psychology and medicine as modern separate professions. The present 4-year curriculum leading to the degree in psychology was first introduced in the United States in 1883 by Johns Hopkins. Thirty years later, Abraham Flexner’s (1910) revelation of the shocking state of medical education in the United States influenced the establishment of a 4-year curriculum leading to the doctor of medicine degree.

The rapid development of each as a profession firmly grounded in science during the 20th century also contributed to the establishment of psychology as a mental health profession. Recognizing these developments in state after state, legislatures introduced mandatory licensing bills for physicians early in the 20th century and for psychologists beginning in 1947.

Established in 1947, the National Institute of Mental Health provided U.S. universities and medical schools with tens of millions of dollars for training in the new professions of clinical psychology and psychiatry. In the early 1960s, the National Heart, Lung, and Blood Institute became the first federal agency to publicly acknowledge that lifestyle and other personal behaviors play a critical role in physical health and illness, and this agency provided funding for training in psychology that focused specifically on the role of behavior in illness and health (Matarazzo, 1980, 1982).

In 1977, some 800 psychologists successfully petitioned the Council of Representatives of APA to establish a formal Division of Health Psychology (Division 38). The first president of that Division, Joseph Matarazzo, provided a working definition of health psychology and also introduced the term behavioral health to acknowledge psychology as a full partner in the health professions (Matarazzo, 1980).

A number of additional initiatives by the APA in the past 25 years were critical in establishing psychology as a health profession. First, APA worked with leaders in the U.S. Congress and State Legislatures to include reimbursement for the health-related services of psychologists in Medicare and in private sector companies offering health insurance. Second, APA worked to include legislation in some states to expand the services provided by licensed psychologists to include the prescriptions of drugs.

Key Areas in the Expansion of Psychology’s Role in Health

In 2001, the APA’s Council of Representatives proposed a by-law to recognize health as a primary mission of the Association...
tion: “The objects of the American Psychological Association shall be to advance psychology as a science and profession and as a means of promoting health and human welfare by . . .” The by-law change was approved by one of the largest pluralities ever of members of the association, with over 95% of the members voting to include health as one of psychology’s primary missions.

APA’s (2001) Healthy World Initiative, chaired by Ronald Rozenzsky, Carol Goodheart and W. Rodney Hammond, had three goals: (1) to promote systematic physical, mental, social, and spiritual health; (2) to promote research and practice that integrates physical and mental health; and (3) to promote psychology as a core discipline in the provision of health care (Johnson, 2004). Using Engel’s (1977) biopsychosocial model of health as a base, the initiative brought together a plethora of research and interventions to demonstrate how psychological research and interventions can help prevent illness, restore health, or reduce the effects of an illness (Johnson, 2003).

In 2001 at the APA Convention in San Francisco, David Satcher, then U.S. Surgeon General, unveiled his report titled Mental Health: Culture, Race, and Ethnicity (U.S. Surgeon General, 2001). The startling data exposed the high rate of suicide, alcoholism, drug addiction, and violence-caused death and injury caused by the unmet mental health needs for African Americans, Hispanics, Asian Americans, Pacific Islanders, and American Indians; the data also focused federal resources on the importance of understanding the impact of culture on the health of all citizens in the United States.

In 2001, Johnson’s (Johnson, 2003) APA presidential initiative, Psychology Builds a Healthy World, challenged psychology to actively remove the line between health and mental health through research, education, public policy, and practice. APA President Ronald Levant’s (2005) presidential initiative, Health Care for the Whole Person, which was chaired by Margaret Heldring, focused on mending the mind–body gap and improving the quality of health care for all Americans.

In 2007, psychology researchers and primary healthcare providers were accepted as important components of the U.S. health care system. Research documenting the interactive effects of mental health on health, and health on mental health, has contributed to a movement toward reintegrating the professions of medical and psychology in health research and service.

Practitioners have expanded their scope of practice to include interventions that promote health and are increasingly sensitive to the aversive effects of illness upon emotional well-being. As psychology practitioners incorporate knowledge of health into their practices, other health professionals and settings have increasingly incorporated psychological knowledge into their day to day functioning (Kaslow et al., 2007; Roberts, 2007). Citing Medicare’s recent charge in coverage of psychological services, Karlin and Humphreys (2007) have advocated for increased effective efforts by psychology to increase political self-efficacy with the psychology community.

Psychologists today engage in state of the art treatments for enhancing the psychological well-being of patients with chronic diseases, such as heart disease (Suls & Bunde, 2005), cancer, diabetes, asthma, HIV, and AIDS (Kaslow et al., 2007). Behavioral, emotional, and social causes (such as accidents, addictions, and violence) remain major contributors to impaired health and disease and require treatments that incorporate the biopsychosocial model of health (Kaslow et al., 2007). Studies have indicated that psychological services in hospitals can decrease the length of a hospital stay (Strain, Hammer, & Fulop, 1994; Strain et al., 1991) and can decrease the frequency of physician’s visits (Chiles, Lambert, & Hatch, 1999).

Psychologists, like Bogg and Roberts (2004), have asked questions such as “What are the behavioral contributors to mortality?” Bogg and Roberts’s investigation into how the relationships between health behaviors and conscientiousness-related traits shape each other over time (p. 912) is relevant to psychologists engaged in psychotherapy with clients who have poor impulse control, have difficulty being task and goal directed and delaying gratification, lack planfulness, and do not respect norms and rules.

Impact of Health-Related Behaviors on Patients After Major Diseases

The research on the contributors and benefits of psychological involvement in the major disease entries—such as cancer, heart disease, asthma, and diabetes—over the past decades led to increased attention to prevention behaviors. Significant biomedical advances and increased prevention have resulted in the mortality rates from cancer and heart disease decreasing at a rapidly accelerating rate. Prevention behaviors, such as increased screening for cancer, decreased smoking, and other behavioral life style changes, were primary factors in the mortality decrease, again stressing the importance of psychological factors in health.

As women with breast cancer increasingly survive the disease—96% with localized disease and 78% of those with regional disease—professional psychologists can expect to see an increasing number of these women in psychotherapy. Studies of the psychological effects of surviving cancer and the differences between survivors who remain distressed and those whose recovery includes healthier functioning (Helgeson, Snyder, & Seltman, 2004) are suggestive of cognitive and relational interventions that might be facilitated by psychotherapy.

Bellizzi and Blank (2006) found that adaptive coping, such as positive reframing, planning, and use of friends, predicted the most posttraumatic psychological benefit in breast cancer survivors. The term posttraumatic positive growth has been used (Tedeschi & Calhoun, 1996) to describe those survivors of cancer and other life threatening diseases who report positive life changes following their diagnosis particularly in the areas of relationship with others and appreciation for life and purpose or priorities in life. A further finding that some breast cancer survivors grow beyond previous levels of functioning in their relationships, purpose in life, and appreciation for life is of particular importance to psychotherapists who work with breast cancer survivors.

Hope and optimism, while helping psychological adjustment, had less effect on posttraumatic growth than adaptive coping. Social-interactional factors related to posttraumatic psychological growth included the following: being married, having employment, and seeking emotional support from friends.

As more patients are surviving cancer and heart disease, research in the area of adjustment following the onset of cancer and
heart disease is increasing with potentially significant impact for treating psychologists. For example, 6 months after the diagnosis of head and neck or lung cancer, 22% of patients in Kangas, Henry, and Bryant’s (2005) study met the criteria for posttraumatic stress disorder. Further research is needed to develop psychological interventions to decrease the impact of posttraumatic stress disorder symptoms arising from medical conditions.

With the research supporting psychological interventions in the spectrum of health from prevention to postcare, in addition to health psychologists, psychotherapists are increasing using information about health and disease in their interventions for individuals, couples, and families. Psychological interventions at a community level with epidemics and community-based trauma and injury, which affect multiple individuals and families, have shown increasingly positive effects on health (De La Cancela, Alpert, Wolff, & Dachs, 2004).

Expanding the Biopsychosocial Model

With enhanced understanding of health and well-being, culture has emerged as a primary contributor to health risk, health care, and well-being (Penner, Albrecht, Coleman, & Norton, 2007). The context of culture includes race, ethnicity, gender, sexual orientation, social economic status, physical well-being, developmental age, and race as primary determiners of health.

Citing research and health care evidence, Johnson (2003) argued for expanding Engel’s (1977) biopsychosocial model of health to explicitly include culture (i.e., biopsychosocialcultural to increase the focus on race and ethnicity on health). Other scholars (Kaslow et al., 2007) include culture as part of the definition of the term “social.” Kaslow et al. (2007, p. 279) defined social as inclusive of the physical environment, external stressors, family environment, interpersonal relationships, social support and isolation, role models, social expectations, value systems, and sociocultural factors (e.g., as race, ethnicity, socioeconomic status, social orientation, religion, school and work history, medical–legal and insurance issues, treatment experience, and culture).

The interaction of race, ethnicity, social status, and gender affects both the availability of health resources and the incidence and severity of disease and illness.

Penner et al. (2007) presented a series of studies and arguments to support the hypothesis that racial prejudice and stereotyping play a significant role in the differences between treatment and diagnosis decisions and medical interventions. National statistics from a variety of sources continue to document that African Americans, Hispanics, Native Americans, and the poor receive fewer preventive health interventions and therefore enter the health system with more advanced health issues (Institute of Medicine, 2001).

Increasingly, health research has focused on the role of social economic class on health care (Global Forum for Health Research, 2002; Kaslow et al., 2007). The interaction of education and income is highly correlated with well-being. Those with less education and less income die sooner and have significantly more health problems of both a chronic and acute nature. When culture, including race and ethnicity, is considered with social economic class, the prevalence of disease, death, and disability increases significantly (Anderson, 2003).

The social construction of gender also influences health policy and the availability and delivery of services (Johnson, 2006). Psychologist Vicky Mays (Chamberlain, 2007) found the diagnosis of AIDS to be 23 times more prevalent in Black women and adolescents than in White women. She recommended a psychologically based public health initiative designed to help women develop healthy relationships and thereby reduce their risk for HIV and AIDS.

In the past, women’s health interventions were based on research that used men as subjects. Worell and Goodheart’s (2006) edited volume on women’s health highlights health risks for women and gender bias in health research and health services, then documents health services that focus on effective coping, well-being, strengths, and resilience for women.

Wide disparities in health services also demonstrate the need for multicultural research-based practices. Jarrett, Yee, and Banks (2007) amassed significant research on women and health to support their thesis that “women’s health needs are best met with a biopsychosocial, integrated model of health care” (p. 306), which includes specific social factors such as multiple roles, socioeconomic status, and violence and victimization. They provided examples of unaddressed health issues for girls and women to support their argument for an integrated system of primary health care in which psychosocial and behavioral research is translated into evidence-based approaches in women’s health.

Contribution of Positive Psychology

Positive psychology has influenced psychology health research to move from looking at negative emotions, such as hostility, depression, and neuroticism, to looking at the implications of positive emotional/cognitive traits, such as conscientiousness (Bogg & Roberts, 2004). Another example of the potential interaction of positive psychology and health comes from the research on benefit finding. Benefit finding refers to the reports of patients that their illness has resulted in some benefits, such as strengthening relationships. Pakenham (2005), while looking at the psychological impact of multiple sclerosis on patients and their families, found that benefit finding assisted in regulating distress and sustaining positive attitudes. These findings provide encouragement for further research into the effects of incorporating benefit finding in psychotherapy.

The APA and Health

The APA is actively engaged in scientific, educational, public interest, and practice activities regarding health. APA’s Chief Executive Officer, Norman Anderson, and three executive directors, Cynthia Belar, Gwendolyn Keita, and Russell Newman, were asked for examples of one or two significant changes in psychology and health since 2001.

Norman Anderson (personal communication, October 2007) commented, “I think one significant change since 2001 has been the increase in psychologists who are interested and working in the broader health care sector.” In his experience, increasing numbers of psychologists have obtained additional training and education in health psychology, resulting in increased opportunities for working in primary health care and, for some, a change in how they practiced.
Cynthia Belar, Executive Director of APA’s Education Directorate and a health psychologist, focused on the Education Directorate’s three successful advocacy programs: (1) recognition was obtained for psychologists in federal law “as health service providers” and as “primary care providers” along with physicians, dentists, and nurses; (2) the federal Community Health Centers Program received authority to hire psychologists; and (3) psychology graduate students became eligible for the National Health Service Corps scholarship program.

Gwendolyn Keita, Executive Director of APA’s Public Interest Directorate, noted how, in addition to increased APA health policies, the focus on psychology as a primary care practice was instrumental in large segments of psychologists seeing the field as a health profession and helped draw outside attention to psychology as a health profession. Increasing numbers of psychologists began to see themselves as having expertise in primary health care and others began to get more training.

Russell Newman, then Executive Director of APA’s Practice Directorate, prioritized the implementation of the health and behavior codes as having a significant impact on the practice of psychology by expanding professional psychologists’ ability to provide health/primary health services. With an impressive statistic, Newman noted how psychologists went from roughly 67,300 claims paid in 2002 by Medicare to approximately 454,300 claims paid in 2005.

**Education and Training in Psychology and Health**

Graduate students have expanded opportunities of study in psychology and health. A primary offering today in most professional doctoral programs is an advanced health psychology class that focuses on the integration of psychology in policy making, hospitals, and training medical doctors and other health professionals. Some of the skills that graduate students are taught include how to complete a quick mental status exam; how to complete a quick cognitive screening; a number of behavioral techniques to manage pain, depression, and anxiety; and understanding the structure of the hospital.

Health psychology provides an essential area of knowledge for students, and it also provides a platform for students to integrate many of the skills they have acquired from other areas of psychology. Health psychology can be offered in a single overview or introductory class format from which all students can benefit.

Given the expanded opportunities in health and psychology, today’s psychology students benefit from exposure to the various “core” aspects of health psychology, including the behavioral management of pain, collaboration of psychology and medicine (including medical science), and the various roles that health psychologists—over 50% of whom work in a clinical setting (Committee on Education and Training, Division 38, n.d.)—can have in a community.

The lack of formal psychology and health education for most psychologists educated before the 1990s requires collaboration between the professional and scientific communities and the individual professional psychologist. The professional community needs to provide appropriate articles, books, and continuing education courses in the integration of health into assessment, consultation, and psychotherapy. The individual psychologist has the responsibility to seek out appropriate continuing education and training opportunities in psychology and health.

**A Vision for Psychology and Health**

Five important trends for psychology and health include the following: (1) an increasing emphasis on the psychosocial and cultural aspects of health; (2) an expanded focus of psychology and health on strengths, well-being, prevention, and positive psychology; (3) the availability of continuing education and web-based opportunities for professional psychologists to expand their skills in assessment and interventions that integrate psychology and health; (4) an accelerated development of evidence-based psychotherapy and health interventions; and (5) an increased role for psychologists in primary care, community health centers, and private practice.

1. **Increased emphasis on the interaction of psychosocial and culture aspects of health.** Who will be the modern Charles Dickens? The poor are getting poorer, and the working class is losing its place with resulting health and mental health problems. As psychologists continue to mobilize psychological science and practice to address the health conditions exacerbated by poverty, race, ethnicity, gender, and sexual orientation, psychology will increasingly play a central role in health science and health services.

   Psychologists need to systematically evaluate how psychology students are educated about the cultural aspects of health and how psychologists are currently delivering culturally sensitive and appropriate interventions. Psychology must continue to actively pursue federal, state, and local governments’ recognition of psychology’s significant expertise in preventive health, health promotion and wellness, as well as treatment and postdisease psychological interventions.

   Professional psychologists will increasingly participate in an expansion of health knowledge across ethnic and economic barriers by developing procedures for educating communities and individuals about health risks and prevention. With both individuals and groups, professional psychologists will teach patients and clients the value of accessing health services early and often. Professional psychologists will routinely teach clients/patients how to advocate effectively for health services with primary care doctors, in emergency rooms, within community health centers, and with health insurers.

   Psychology’s research and professional knowledge about health is relevant for the changing world condition also. In a personal communication, Pat DeLeon (personal communication, 2007) highlighted a recent United Nations Executive Summary that found as world conflicts decreased and HIV/AIDS in Africa began to level off, the role of nutrition and violence in human health becomes increasingly important.

2. **An expanded focus of psychology and health on strengths, well-being, prevention, and positive psychology.** Psychology has a growing body of research and practice that focuses on the effects of using strength-based approaches, well-being, and positive psychology (Snyder & Lopez, 2002). Using these psychological and health approaches, professional psychologists will increasingly develop practice specialties that focus on preemptive mental health to influence healthy bodies and minds. A movement toward more group practices that interface with community resources—schools,
hospitals, businesses—that promote healthy communities will become more predominant than solo private practices.

Professional psychologists will be recognized as having expertise in preparing clients to advocate and receive appropriate and effective health care both in the prevention of and treatment of diseases. To do so, professional psychologists will develop intake forms that include the health and mental health of clients, clients’ spouses and children, and extended family. Psychologists will need ready access to the latest health information on disease and wellness as well as psychological interventions that are responsive to the interactions among and between health and mental health issues on the individual, couple, and family level.

3. Continuing education and web-based opportunities for professional psychologists to expand their skills in assessment and interventions that integrate psychology and health. Continuing education offerings for professional psychologists and Internet access regarding health and psychology are necessary for today’s psychologist to stay current in a rapidly changing health environment. As professional psychologists integrate health care into their practices, patients will be taught how to advocate for good health care, to know what to ask their primary care physicians, and how to evaluate whether they are getting appropriate integrated care. Increasing numbers of psychologists will be able to see beyond the patient in the room and understand the implication of a family member’s health for the patient in treatment.

4. Evidence-based practice and evidence-based psychotherapy and health. Psychological science has made major contributions to the health field in the United States. However, for psychology practice to be considered an equal partner with medicine in the health field, psychologists must continue to develop evidence-based practices that integrate research in mental health with health research. In 2005, the APA adopted a policy statement regarding evidence-based practice in psychology (Goodheart & Kazdin, 2005), which is defined as the integration of the best available research with clinical expertise in the context of patient characteristics, culture, values, and preferences.

Despite a continuing debate on the meaning and requirements of terms, such as evidence-based treatment and evidence-based practice, the vast majority of psychologists today espouse a research base to psychotherapeutic interventions. Evidence-based practice supports psychologists’ struggle for parity between mental health and health. One such advance is the new health psychology series to inform clinical practice. (Davison, Trudeau, & Smith, 2006).

Amidst significant debate about methods for implementation, increasing consensus is developing that interventions in psychology and health must be informed by research that integrates the biological and social cultured bases of behavior (Kaslow et al., 2007; Roberts, 2007). Goodheart (2006) developed a cogent thesis on the underlying disagreements among psychology practitioners. She suggested that the differences lie in how evidence is defined and how the endeavor of psychotherapy is viewed (Goodheart, 2006, p. 39). Although there is approaching consensus on the importance of developing evidence-based treatments and/or evidence-based practices, an intense debate continues in psychology about the methods for developing and evaluating evidence-based treatments and evidence-based practices.

5. An increasing role for psychologists in primary care, community health centers, telehealth, and private practice. The expansion of therapeutic interventions in the field of psychology and health spans the spectrum of health prevention, illness, and post-disease care. Psychologists who integrate knowledge of chronic and acute diseases into their mental health treatments have practice options in a pantheon of settings, including, but not limited to, traditional health centers, community health centers, businesses, and private practice (DeLeon, Kenkel, & Belar, 2007).

Psychology community health research and professional psychologists will have an increasingly major impact on the delivery of health care in the United States over the next 10 years (Cynkar, 2007). Over 100,000 adults die each year from injuries, at a cost to society in excess of 260 billion dollars (Sleet, Hammond, Jones, Thomas, & Whitt, 2003). The past decade has seen an increased emphasis on the role of behavior, emotional, and cognitive states on health risks, such as the incidence of HIV, AIDS, accidents, injury, and sexual and physical abuse. These and other health risks are community health problems and respond to a community health approach.

The next decade of health interventions will build on the growing body of research about the benefit of community health centers in which medical staff and psychologists combine expertise to treat the whole person. Because of the research, increasing numbers of primary care psychologists work with other health care professionals to offer counseling and behavioral interventions to patients in medical settings and community health centers (DeLeon et al., 2007; Packard, 2007).

Centers where psychologists are part of the medical team will also increase by building on models, such as described by the psychologist Edward Noffsinger (Cynkar, 2007). The expansion of psychologists as equal partners in health will result from several factors: (a) the importance of integrating health research with psychological interventions, (b) the psychologists’ expertise in group dynamics and understanding of the complex relationship between physical and mental health, and (c) the ability to engage in both individual interventions and group discussions during patients’ shared medical appointments.

Psychology has a plethora of tools for maintaining health and restoring health. Traditional mental health interventions (e.g., combating depression and anxiety) assist in health maintenance. Also, brief interventions of a cognitive and/or behavioral nature—such as teaching relaxation or increasing health behaviors, for example, smoking cessation (James & Folen, 2005; Packard, 2007)—can be valuable additions to a patient’s annual health visit to his/her primary care physician/psychologist.

As we observed earlier, the complexity of life requires a complexity of solutions. Psychologists understand and respect this complexity. Psychology science and practice have formed the basis of society’s changed views of health and human relationships and have assisted in understanding the individual within the context of his/her culture, which includes gender, ethnicity, sexual orientation, physical well-being, social economic status, development age, and race. The next 10 years will bring psychology increasingly forward as an equal partner in the health of the people living in the United States.
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