CHAPTER 1

Health Psychology: Overview

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WHAT IS “HEALTH”?

Before discussing health psychology, it is helpful to clarify what is meant by the term health. To understand the use of this term, we must take a dip into etymology, the study of the origin of words. Etymologists suggest that the word health originated in Old High German and Anglo-Saxon words meaning “whole,” “hale,” and “holy.” The etymology of heal has been traced to a Proto-Indo-European root kailo- (meaning “whole,” “uninjured,” or “of good omen”). In Old English, this became hælan (“to make whole, sound, and well”) and the Old English hal (“health”), the root of the adjectives “whole,” “hale,” and “holy” and the greetings “Hello,” “Hallo,” or “Hi.”

Galen (C.E. 129–200), the early Roman physician, followed Hippocratic tradition in believing that hygiene (health) or euexia (soundness) occurs when a balance exists between the four humors: black bile, yellow bile, phlegm, and blood. Galen believed that the body’s constitution could be put out of equilibrium by excessive heat, cold, dryness, or wetness. Such imbalances might be caused by fatigue, insomnia, distress, anxiety, or food residues from eating the wrong quantity or quality of food. For example, an excess of black bile would cause melancholia. The theory was closely related to the theory of the four elements: earth, fire, water, and air (Table 1.1). Some current health beliefs are direct descendants of ancient Greek and Roman theories of medicine. In winter, when it is chilly and wet, we might worry about catching a cold, caused by a buildup of phlegm. In summer, we might worry about not drinking enough water to avoid becoming hot and bothered, or bad-tempered. The idea of health as an optimum balance between elements of life is a principle that remains relevant to modern constructions of health. In Chinese medical theory, the yin-yang balance concept is fundamental, along with microcosm-macrocosp correspondences (tien-jen-hsiang-ying) and harmony (t ‘ao-ho) (Kleinman & Lin, 1981). The concept that health consists of a balance of elements is a core feature across diverse cultures and times. In valuing balance, Western and Eastern cultures have not changed in 2,000 or 3,000 years.

Health, illness, medicine, and health-care stories are plentiful in the mass media, especially about the dread diseases: cancer, HIV, and, more recently, obesity. The Internet spews out stories by the million on every health-related topic at the touch of a few keys. A popular search engine revealed a total of 1.24 billion items on “health.” This total may be compared to the lower figure of 1.19 billion items on “sex” and a meager 0.568 billion items on “football.”

In spite of universal interest, there is not a single accepted definition of health. Experts and laypeople alike act as if they know what is meant by the term, and so there is no pressing need to define it. This lacuna of presumption is a source of confusion in the theory and policy of health care. The World Health Organization (Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, June 19–22, 1946) defined health as follows: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” This definition has obvious flaws. One must doubt whether any living person could ever reach “a state of complete physical, mental and social well-being.” More familiar to most people is the opposite state: incomplete

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TABLE 1.1 Galen’s Theory of Humors

<table>
<thead>
<tr>
<th>Humor</th>
<th>Season</th>
<th>Element</th>
<th>Organ</th>
<th>Qualities</th>
<th>Personality</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>Spring</td>
<td>Air</td>
<td>Liver</td>
<td>Warm and moist</td>
<td>Sanguine</td>
<td>Courageous, hopeful, amorous</td>
</tr>
<tr>
<td>Yellow bile</td>
<td>Summer</td>
<td>Fire</td>
<td>Gallbladder</td>
<td>Warm and dry</td>
<td>Choleric</td>
<td>Easily angered, bad-tempered</td>
</tr>
<tr>
<td>Black bile</td>
<td>Autumn</td>
<td>Earth</td>
<td>Spleen</td>
<td>Cold and dry</td>
<td>Melancholic</td>
<td>Despondent, sleepless, irritable</td>
</tr>
<tr>
<td>Phlegm</td>
<td>Winter</td>
<td>Water</td>
<td>Brain/lungs</td>
<td>Cold and moist</td>
<td>Phlegmatic</td>
<td>Calm, unemotional</td>
</tr>
</tbody>
</table>

physical, mental, and social well-being, with the presence of illness or infirmity. Apart from the idealism of the WHO definition, it missed key elements of health, elements that many believe to be fundamental. Health is a multidimensional state, which is complex, complicated, and nonreductive.

Any health psychologist would insist that health has psychological aspects that must be included in any definition of health. Psychological processes such as cognition, imagination, volition, and emotion are all mediators of health experience. The adjective psychosocial is preferred to the more restrictive psychological, denoting that human behavior within social interaction influences the wellness–illness continuum (Cohen & Wills, 1985). Culture (e.g., Landrine & Klonoff, 1992) and economic status (e.g., Adler et al., 1994; Kawachi et al., 1997) are also mediators of health. Spirituality can significantly strengthen resilience in the face of illness, grief, and suffering (e.g., Thoresen, 1999). For many people, spirituality is an essential part of what it means to be human. Sawatzky, Ratner, and Chiu (2005) carried out an extensive literature search of 3,040 published reports, from which 51 studies were included in a final analysis. They reported a bivariate correlation between spirituality and quality of life of 0.34 (95% CI: 0.28–0.40). The authors concluded: “The implications of this study are mostly theoretical in nature and raise questions about the commonly assumed multidimensional conceptualization of quality of life” (p. 153). In one’s practice as a health psychologist, personal leanings as a believer or nonbeliever are not an issue; the patient is the focus, and the patient’s spiritual or religious needs can never be discounted. They can be a potent force in rehabilitation, therapy, or counseling.

With these thoughts in mind, I offer the following definition of health: Health is a state of well-being with physical, mental, psychosocial, educational, economic, cultural, and spiritual aspects, not simply the absence of illness. The principle of compensation enables any one element that is relatively strong to compensate for lack in one or more other elements. If one or more of the elements is diminished, a person may yet experience a positive and sustainable state of health. This feature is illustrated in Figure 1.1 (see cases C and D). Thus balance and compensation are as important as the individual strength of any one particular element.

Researchers have struggled with the possibility of measuring health by using a single universal scale of measurement. The complexity of the task is evidenced by the structure of scales developed to measure health. Four leading scales are:

1. The Nottingham Health Profile (Hunt, McKenna, McEwan, Williams, & Papp, 1981) scored 0–100 using six subscales for Physical Mobility, Sleep, Emotional Reactions, Energy, Social Isolation, and Pain.
2. The SF-36 (Ware & Sherbourne, 1992) score 100–0, using eight subscales for Physical Functioning, Role Physical, Role Emotional, Vitality, Mental Health, Social Functioning, Bodily Pain, and General Health Perceptions.
3. The COOP/WONCA (Nelson et al., 1987) scored 1–5, using six subscales for Physical Fitness, Feelings, Daily Activities, Social Activities, Change in Health, and Overall Health.
4. The EuroQol (Williams, 1990) scored 1–3, using five subscales for Mobility, Self-Care, Usual Activities, Pain/Discomfort, and Anxiety/Depression.

Essink-Bot, Krabbe, Bonsel, and Aaronson (1997) factor-analyzed the four scales and derived factors.
correspond to two of the seven dimensions in the present theory, physical health and mental health. Empirical support for the five remaining dimensions is available in multiple reviews and meta-analyses: psychosocial (e.g., Uchino, Uno, & Holt-Lunstad, 1999), economic status (e.g., Douglas, 1950; Marmot et al., 1991), educational (e.g., Gesteira, 1950), culture (e.g., Kleinman, Eisenberg, & Good, 1978; Office of Behavior and Social Science Research, 2004; Pelletier-Baillargeon & Pelletier-Baillargeon, 1968), and spirituality (e.g., Ellison & Fan, 2008; Thoresen, 1999). None of these mediators of health is a new discovery. We have been slow as a discipline to acknowledge their primary role in our construction of what it means to be healthy.

The principle of compensation has a parallel in economics in the form of resource substitution: When wants and needs exceed the available resources, then a different resource will be used to fulfill those wants and needs. A similar principle operates between health and education, in which the absence of one resource is less harmful if other resources can substitute for it (Ross & Mirowsky, 2006). The balance of the seven ingredients in this recipe for health should be considered when attempting an account of a particular person’s state of health.

The trends shown later in Figure 1.3 indicate that research on cultural differences in health behavior is gradually increasing. Continuation of this trend will enable theory and practice to converge more effectively in creating interventions relevant to those who most need them. In illustrating this point, Adams and Salter (2007) focused on African settings. The authors explored three culture-specific examples of health concerns from Africa: the prominent experience of personal enemies, epidemic outbreaks of genital-shrinking panic, and fears about sabotage of vaccines in immunization campaigns. One can envision totally different health psychologies emerging from diverse cultures. The health psychology of high-income countries, as currently formulated, could well prove almost irrelevant to cultures existing outside of these zones. Within a country, widespread cultural, socioeconomic, and ethnic differences are evident in many aspects of health experience. Banthia, Moskowitz, Acree, and Folkman (2007) measured religiosity, prayer, physical symptoms, and quality of life in 155 U.S. caregivers. The findings indicated that prayer was significantly associated with fewer health symptoms and better quality of life only among less educated caregivers. This finding shows how a resource from one domain (spirituality) can compensate for a lack in another (education).

### POLICY, IDEOLOGY, AND DISCOURSE

Health psychology is concerned with the application of psychological knowledge and techniques to health, illness, and health care. The objective is to promote and maintain the well-being of individuals, communities, and populations. The field has grown rapidly, and health psychologists are in increasing demand in health care and medical settings. Although the primary focus has been clinical settings, interest is increasingly directed toward interventions for disease prevention, especially sexual health, obesity, alcoholism, and inactivity, which have joined smoking and stress as targets for health interventions.

It is evident that everyday concepts of healthy living have advanced little since classical times. Current public health priorities and the associated interventions correlate with ancient concepts of the evils in society that need to be amended. Pope Gregory I was familiar with them all when, in A.D. 590, he defined the seven deadly sins (Table 1.2).

A holistic tendency, embracing a biopsychosocial approach, is increasingly evident within health care. Health psychologists are working in collaboration with multidisciplinary teams at different levels of the health-care system to perform a variety of tasks: carrying out research; systematically reviewing research; helping to design, implement, and evaluate health interventions; training and

### TABLE 1.2 Seven Deadly Sins, Common English Terms, Behavioral Counterparts, and Available Interventions

<table>
<thead>
<tr>
<th>Sin</th>
<th>Pope Gregory</th>
<th>Common English</th>
<th>Associated Behavior/Symptoms</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>luxuria</td>
<td>lust, promiscuity</td>
<td>Sexual addiction/STI/HIV</td>
<td>Contraception/sexual health/hygiene/rehab</td>
</tr>
<tr>
<td>2</td>
<td>gula</td>
<td>gluttony</td>
<td>Obesity/diabetes/cancer</td>
<td>Dieting, rehab</td>
</tr>
<tr>
<td>3</td>
<td>avaritia</td>
<td>greed</td>
<td>Type A/hypertension/stroke/MI</td>
<td>Stress management training, meditation, yoga</td>
</tr>
<tr>
<td>4</td>
<td>acedia</td>
<td>laziness</td>
<td>Inactivity/sedentary lifestyle/obesity</td>
<td>Fitness coaches, activity programs, personal trainers</td>
</tr>
<tr>
<td>5</td>
<td>ira</td>
<td>anger</td>
<td>High blood pressure/cardiac arrest</td>
<td>CBT, anger management, self-help</td>
</tr>
<tr>
<td>6</td>
<td>invidia</td>
<td>envy</td>
<td>Lack of self-esteem</td>
<td>CBT, self-help</td>
</tr>
<tr>
<td>7</td>
<td>superbia</td>
<td>pride</td>
<td>Egotism</td>
<td>[Not perceived as requiring treatment]</td>
</tr>
</tbody>
</table>
teaching; consultancy; providing and improving health services; carrying out health promotion; designing policy to improve services; and advocating social justice so that people and communities are enabled to act on their own terms.

A community perspective, promoting strategies for social change at the local level that can facilitate improved health and well-being, complements a focus on individuals. Within the latter paradigm, a communitarian perspective to health work can generate alternative methods of interventions. In working toward social justice and the reduction of inequities, people’s rights to health and freedom from illness are viewed as a responsibility of planners, policy makers, and leaders of people wherever they may be (Marks, 2004). Individual and community approaches offer much potential for reducing health inequalities, but they both can also potentially distract attention from the broader structural causes of ill health. Health psychology training in masters and doctoral programs is available both within the community psychology framework and in mainstream health psychology (Marks, Sykes, & McKinley, 2003). I discuss the community approach later in this chapter. First, I deal with the dominant paradigm focused on the health of the individual.

The dominant discourse within neoliberal health policy has been that of the autonomous individual in which each individual is an agent, responsible for his or her own health. The dominant ideology of individualism dictates that each person is motivated by self-interest to elevate his or her well-being with the least effort and resources possible. The cult of the individual spawned the notion of the responsible consumer (RC). The RC is an active processor of information and knowledge concerning health and illness and makes rational decisions and responsible choices to optimize well-being. The epitome of the RC is the hypothesized “anything in moderation” person who eats five-a-day, never smokes, drinks alcohol in moderation, exercises vigorously for at least 30 minutes three times a week, always uses a condom when having sex, and sleeps 8 hours a day. The stereotype of the more common irresponsible consumer (IC) is the so-called couch potato, who enjoys beer and cola, smokes, eats junk food, watches TV for many hours each day, and rarely exercises. Accordingly, responsibility for illness relating to personal lifestyle is seen as the fault of the individual, not an inevitable facet of a social, corporate, economic environment designed to maximize shareholder profits.

Using a mixture of well-intentioned pleading, information, and advice, the traditional approach to health education aimed to persuade people to change their habits and lifestyles. Information campaigns designed to sway consumers into healthier living were the order of the day. The Report of the 2000 Joint Committee on Health Education and Promotion Terminology defined health education as “any combination of planned learning experiences based on sound theories that provide individuals, groups, and communities the opportunity to acquire information and the skills needed to make quality health decisions” (Joint Committee on Terminology, 2001). In combination with policy and taxation, and against significant commercial forces, health education could claim some limited success over the past 50 years, such as the fall in lung cancer rates (Figure 1.2). Tobacco control has become a low but noteworthy benchmark for what may be achieved through consistent public policy, educational campaigns, and behavior change. However, the health gains made by this route were hard-won. The main public health call today is for a vigorous campaign to halt the obesity epidemic. If similar methods to those deployed for tobacco are used (i.e., voluntary controls, advertising restrictions, product labeling, health education), then it could take 50 to 70 years before obesity rates go into decline.

Endemic toxicity diffuses all health determinants: physical, mental, psychosocial, educational, economic, cultural, and spiritual. Lack of exercise and a poor diet, helplessness, loneliness, illiteracy, poverty, alienation, and cynicism are enemies of health and well-being. Christakis and Fowler (2007) argue from studies of social networks that obesity spreads along social lines of influence. They evaluated a social network of 12,067 people from 1971 to 2003 and found clusters of obese persons at all time points. The clusters extended to three degrees of separation. A person’s chance of becoming obese was increased by 57% if he or she had a friend who had become obese in a given interval. Network phenomena appear to be relevant to the biologic and behavioral trait of obesity, and obesity appears to spread through social ties. Social imitation in networks could be as important a determinant of health as any individual decision to live a healthy life.

In recent decades, appealing to the right-minded anything-in-moderation consumer has been prevalent throughout health care. The prescription to live well has always had a distinctively moral tone. Health promotion policy has been portrayed as a quasi-religious quest, a war against the deadly old sins of gluttony, laziness, and lust (Table 1.2). Discourse analysis of public health policy statements makes this fact all too clear. For example, Sykes, Willig, and Marks (2004) analyzed the text of the European Commission’s “Community Action Programme
on Health Promotion, Information, Education and Training 1996–2000.” There were plentiful examples of religious discourse within the program text. The program was constructed as insightful, almost enlightened, and on a mission or crusade with a message to spread. For the message to be spread effectively, believers had to be organized, with special inductions and training of practitioners to spread the message. Just like a religion, it was concerned with sharing and giving. In a similar vein as religious literature, there was a clear emphasis and distinction on what is good and what is bad. Those who partake in what is considered good will be given the best and reap the benefits in terms of good health and interventions that are based on scientific findings. Not wasting, patience, and control were clearly valued. However, the religion of health promotion was constructed as new and modern. It was different from traditional religions in that as long as followers believe in the principles of health promotion, differences can be accommodated. It was seen as inspiring rather than overprotective and not unconditionally generous.

By contrast, the construction of health promotion as having an enemy drew on a military discourse. Health promotion experts were represented in the same way politicians and diplomats handle potential threats of war. Experts meet to decide structure and strategies to combat the enemy. Members of the public were not invited to these meetings. Health promotion practitioners were then instructed as to the decisions, just like soldiers who are given their orders and commanded at the front line.

The demise of the responsible consumer within health policy is imminent. Common observation and decades of research show that people are really pushed and pulled in different directions while exercising their so-called freedom of choice. Emotions and feelings are as important in making choices as cognition. The beneficial satisfaction of needs and wants must be balanced against perceived risks and costs. Health policy is beginning to acknowledge both the complexity of health and the power of the market. Witness the huge scale of the advertising industry: $279.6 billion or 2.0% of GDP in the United States alone (Coen Structured Advertising Expenditure Dataset, 2011). An inevitable compromise exists between what any individual wants and needs and the available means to satisfy those wants and needs (satisficers; Simon, 1956). The conditions for need satisfaction are seldom optimum. For many, they are chronically suboptimum.
8 Overview

It is accepted by government and health authorities that human activity is a reflection of the physical, psychosocial, and economic environment. The built environment, the sum total of objects placed in the natural world, dramatically influences health. The toxic environment propels people toward unhealthy behaviors, directly causing mortality and illness (Brownell & Fairburn, 1995). People become overweight and obese because they inhabit an obesogenic environment, which contains nasty, fatty, salty, sugary foods. For example, popular items like hot dogs and chicken nuggets, which are often made with mechanically recovered meat, can contain as little as 0% real meat. The ready availability of such low-cost items offers consumers little real choice when income levels are low and living costs, rents, and house prices are high.

Mass degradation and poisoning of health begin early in life. It takes in all aspects of the environment, including every facet of the physical, mental, and psychosocial worlds. This concept is not a new one. Witness the works of Hogarth from the 18th century (Figure 1.3).

Apparently, nothing is new: 245 years after Hogarth’s etching, Garbarino and Eckenrode (1997, p. 12) stated: “Children’s social world has become poisonous, due to escalating violence, the potentially lethal consequences of sex, diminishing adult supervision, and growing child poverty.”

Recent government policy documents in the United Kingdom indicate that reliance on consumers as responsible decision makers is waning but remains a primary strategy. The environment and corporations are being given a larger role. In Healthy Lives, Healthy People: Our Strategy for Public Health in England (2010), the government states:

2.29 Few of us consciously choose “good” or “bad” health. We all make personal choices about how we live and behave: what to eat, what to drink and how active to be. We all make trade-offs between feeling good now and the potential impact of this on our longer-term health. In many cases, moderation is often the key.

2.30 All capable adults are responsible for these very personal choices. At the same time, we do not have total control over our lives or the circumstances in

These engravings were in support of the Gin Act of 1751, which made the distillation of gin illegal in England. On the left-hand side, Beer Street shows a happy, hardworking city drinking good English beer. On the right, Gin Lane depicts the nightmare scenario of scrawny, lanky, careless people drinking gin, where a drunken mother is dropping her baby to its doom.

Figure 1.3 Beer Street and Gin Lane, a pair of 1751 engravings by William Hogarth
which we live. A wide range of factors constrain and influence what we do, both positively and negatively.

2.3.1 The Government’s approach to improving health and wellbeing—relevant to both national and potential local actions—is therefore based on the following actions, which reflect the Coalition’s core values of freedom, fairness and responsibility. These are:

- strengthening self-esteem, confidence and personal responsibility;
- positively promoting ‘healthier’ behaviors and lifestyles; and
- adapting the environment to make healthy choices easier. (p. 29)

In this policy document, personal responsibility remains at the top of the agenda. The statement that “we do not have total control over our lives or the circumstances in which we live” is a small step forward, but, unfortunately, taking two steps back negates this. Only holistic public policies can lower the toxicity of the environment, and to declare otherwise is a cop-out. Yet large corporations are engaged as the new allies of health promotion in the 21st century. The U.K. government has enlisted the food industry, including McDonald’s and Kentucky Fried Chicken, among other corporations, to help to write policy on obesity, alcohol, and diet-related disease (McDonald’s, KFC and Pepsi, 2011). Processed food and drink manufacturers, including PepsiCo, Kellogg’s, Unilever, Mars, and Diageo, are contributing to five “responsibility deal” networks set up by Health Secretary Andrew Lansley. In a similar sponsorship arrangement to previous Olympic Games, McDonald’s and Coca-Cola are sponsoring the 2012 London Olympics.

In the United States, there has been a similar shift in thinking: the anything-in-moderation philosophy of responsible consumption is no longer the principal foundation for public health interventions. The Surgeon General’s Vision for a Healthy and Fit Nation (Surgeon General, 2010) states:

Interventions to prevent obesity should focus not only on personal behaviors and biological traits, but also on characteristics of the social and physical environments that offer or limit opportunities for positive health outcomes. Critical opportunities for interventions can occur in multiple settings: home, child care, school, work place, health care, and community. (p. 5)

In 21st-century health care, the opportunities for health psychological interventions to assist within the major settings has never been greater. But one must ask whether the discipline is fit to meet these challenges. Alternative methods must be tried and tested if we are to make inroads into the massive scale of issues on the public health agenda. In the next sections, I discuss different health psychology approaches to public health work.

Health Psychology Trends

In this section, I review trends in health psychology research and summarize bibliometric data concerning trends over time within some of the most prominent subfields in the discipline.

Growth in Studies

Over the past 20-plus years, there has been a remarkable growth in studies in health psychology. In each of the past few years, about 18,000 articles on health psychology have appeared in the peer-reviewed literature. The topic of stress continues to be of significant interest, with around 6,000 studies per year, and around 1,300 studies per year are concerned with coping. Following the zeitgeist, the concept of self-efficacy has been a leading topic for studies of health behavior. Self-efficacy is the belief that one is capable of performing in a specified manner to attain certain health goals, such as to quit smoking and to do more exercise. In other words, it is the belief that one can be fully rational or responsible in relation to the attainment of a health goal or behavior change.

Figure 1.4 shows trends in specific types of studies over the period 1990–2009 categorized by topic: self-efficacy, cultural differences, poverty, spirituality, cognitive-behavioral therapy, motivational interviewing, and mindfulness-based stress control. The search included studies concerned with the main targets for health psychology interventions: drinking, smoking, pain, weight control, diet, exercise, and condom use. Another search looked for the topic psycho-oncology. All eight topics showed significant increases in peer-reviewed publications over the 20-year period, rising collectively 14-fold, from fewer than 100 studies in 1990 to about 1,400 studies per year by 2009. Studies concerned with poverty and health behavior showed a ninefold increase over 20 years, spirituality received a 21-fold increase, and CBT a 40-fold increase. Motivational interviewing and mindfulness were hardly even mentioned back in 1990, but together they generated around 200 studies concerning health behavior by 2009. Self-efficacy studies more than equaled the total number of the other seven topics combined.
Overview

The ISI Web of Knowledge database was searched using each main term: self-efficacy, cultural differences, poverty, spirituality, cognitive-behavioral therapy (CBT), motivational interviewing (MI), and mindfulness in combination with all of the health issues of drinking, smoking, pain, weight control, diet, exercise, or condoms. Another search counted the listings for psycho-oncology.

Figure 1.4  Trends in numbers of health psychology studies, 1990–2009

Cognitive-Behavioral Therapy
The principles of cognitive therapy or cognitive-behavioral therapy (CBT) were developed 50 years ago (e.g., Beck, 1964). Its earliest applications in the domain of psychiatric disorders were later extended to the health psychology domain. Meta-analyses and randomized controlled trials have shown CBT to be an effective intervention with varying efficacy in the following areas: anger management (Beck & Fernandez, 1998), chronic pain (Morley, Eccleston, & Williams, 1999), bulimia nervosa (Ghaderi & Andersson, 1999), smoking (Sykes & Marks, 2001), irritable bowel syndrome (Lackner, Morley, Dowzer, Mesmer, & Hamilton, 2004), long-term glycemic control (Ismail, Winkley, & Rabe-Hesketh, 2004), sleep problems in older adults (Montgomery & Dennis, 2004), distress and pain in breast cancer patients (Tatrow & Montgomery, 2006), chronic fatigue syndrome (Malouff et al., 2008), group psychotherapy with HIV-infected individuals (Himelhoch, Medoff, & Oyeniyi, 2007), adult alcohol and illicit drug use (Magill & Ray, 2009), fibromyalgia symptoms (Glombiewski et al., 2010), and childhood and adolescent obesity (Kelly & Kirschenbaum, 2011).

Motivational Interviewing
Motivational interviewing is a method of counseling clients who require help with behavioral issues, a method that was developed initially by Miller and Rollnick for people suffering from problem drinking (Rollnick & Miller, 1995). Motivational interviewing principles and techniques have been adapted to a variety of domains within the sphere of health psychology. Dunn, Deroo, and Rivara (2001) reviewed the effectiveness of brief behavioral interventions using adaptations of the principles and techniques of motivational interviewing (AMI) to four behavioral domains: substance abuse, smoking, HIV risk, and diet/exercise. The authors synthesized data from 29 randomized trials of MI interventions. Sixty percent of the 29 studies yielded at least one significant behavior change effect size, suggesting that MI is an effective substance abuse intervention method when used by clinicians who are non-specialists in substance abuse treatment. The data were inadequate to judge the effect of MI in the other three domains.

Burke, Arkowitz, and Menchola (2003) conducted a meta-analysis on controlled clinical trials investigating AMIs. They reported that AMIs yielded moderate effects (from .25 to .57) compared with no treatment and/or placebo for alcohol, drugs, and diet and exercise. Burke and colleagues reported that AMIs showed clinical impact, with 51% improvement rates, a 56% reduction in client drinking, and moderate effect sizes on social impact measures ($d = 0.47$). However, the results did not support the efficacy of AMIs for smoking or HIV-risk behaviors.
Rubak, Sandboek, Lauritzen, and Christensen (2005) evaluated the effectiveness of AMIs in different disease domains. Their meta-analytic findings showed significant effects for AMIs for body mass index, total blood cholesterol, systolic blood pressure, blood alcohol concentration, and standard ethanol content, but combined effect estimates for cigarettes per day and for HbA(1C) were not significant. In approximately three of four studies, AMIs had a significant, clinically relevant effect, with an equal effect on physiological (72%) and psychological (75%) disorders. Interestingly from a health psychology viewpoint, psychologists and physicians obtained an effect in approximately 80% of the studies, while other healthcare providers obtained an effect in only 46% of studies. When using motivational interviewing in brief encounters of 15 minutes, 64% of the studies showed an effect, and more than one encounter with the patient was found to improve the effectiveness of AMIs.

The findings of meta-analyses show the potential for MI, which “outperforms traditional advice giving in the treatment of a broad range of behavioral problems and diseases” (Rubak et al., 2005, p. 305). However, large-scale studies are needed to justify expanding its use in primary and secondary healthcare.

Mindfulness-Based Stress Reduction

Mindfulness-based stress reduction (MBSR) is a structured group program employing mindfulness and meditation to alleviate suffering and pain experienced with physical, psychosomatic, and psychiatric disorders. The program aims to enhance moment-to-moment awareness of perceptible mental processes. MBSR assumes that greater awareness of conscious mental processes will provide more veridical perception, reduce negative affect, and improve coping and a sense of vitality. In the past three decades, a body of research findings has lent support to the use of MBSR in a variety of health psychology domains. Grossman, Niemann, Schmidt, and Walach (2004) performed a meta-analysis of studies related to MBSR. Twenty empirical studies met criteria of acceptable quality or relevance to be included in the meta-analysis. The acceptable studies covered a wide spectrum of clinical populations, including pain, cancer, heart disease, depression, and anxiety. The results suggested that MBSR “may help a broad range of individuals to cope with their clinical and nonclinical problems” (Grossman et al., 2004, p. 226). In a further meta-analysis, Grossman and colleagues (2007) found evidence supporting the use of MBSR as an intervention for fibromyalgia. Larger-scale studies are needed to compare the relative effectiveness of CBT, MBSR, and AMIs.

A Statistical Obsession

A chronic problem throughout psychology is the persistent use of null hypothesis testing. In spite of the critical analyses by Jacob Cohen (1994), null hypothesis elimination with small samples remains the main methodological approach for theory testing in psychology. The power, validity, and generalizability of the huge majority of studies is questionable, yet we do not really know their true merit because of the uncertainties about representativeness, sampling, and statistical assumptions. Rarely are alternative—and arguably superior—approaches to theory testing utilized, for example, Bayesian methods or power analyses to assess the importance of effects rather than their statistical significance (G. Smedslund, 2008). There is chronic lack of power in published studies, which, for pragmatic reasons, generally employ samples that are too small to permit definite conclusions, a situation systematic reviews and meta-analyses are unable to mend. One wonders whether a reviewer in 20 years’ time will be able to say anything different about this topic.

Scales

Over the 20-year period 1990–2009, use of scales designed to measure health status has been dominated by three front-runners: the McGill Pain Questionnaire (Melzack, 1975), the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983), and the SF-36 Health Survey (Brazier et al., 1992). The SF-36 is by far the most utilized scale in clinical research, accounting for around 50% of all clinical studies (Figure 1.5).

Other scales used increasingly in clinical studies are (in no particular order) the Pediatric Quality of Life Inventory (Varni, Seid, & Rode, 1999), Multidimensional Health Locus of Control (Wallston, Wallston, & Devellis, 1978), Illness Perception Questionnaire (Weinman, Petrie, Moss-Morris, & Horne, 1996), Arthritis Impact Measurement Scales (Fagerstrom & Schneider, 1989; Meenan, Gorman, & Mason, 1980), Functional Living Index, Cancer (Schipper, Clinch, McMurray, & Levitt, 1984), Fibromyalgia Impact Questionnaire (Buckhardt, Clark, & Bennett, 1991), Functional Living Index (Schipper et al., 1984), Youth Risk Behavior Survey (Centers for Disease Control, 1991), Patient Health Questionnaire (Spitzer, Kroenke, Williams, & the Patient Health Questionnaire Primary Care Study Group, 1999), and the Spiritual Well-Being Scale (Peterman, Fitchett, Brady, Hernandez, & Cella, 2002).

Scales to measure affect, stress, and/or coping are also in increasing use: the Social Readjustment Rating Scale (Holmes & Rahe, 1967), Impact of Event Scale (Horowitz, Wilner, & Alvarez, 1979), the Ways of Coping
The number of items in the ISI Web of Knowledge database was searched for each scale.

**Figure 1.5** Trends in numbers of health psychology studies using different research measures and methods, 1990–2009

Checklist (Folkman & Lazarus, 1980), the Daily Hassles and Uplifts Scale (Kanner, Coyne, Schaefer, & Lazarus, 1981), Positive and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988), COPE (Carver, 1989), Clinician-Administered PTSD Scale (Blake et al., 1995), and PTSD Checklist (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996).

**Theories**

Major research efforts have been devoted to Folkman and Lazarus’s (1980) transactional model of stress and to various scales intended to evaluate health- and stress-relevant variables. Theories receiving the most attention were the health belief model (Rosenstock, 1966), theory of reasoned action (Fishbein, 1967), theory of planned behavior (Ajzen, 1985), transtheoretical model (Prochaska & di Clemente, 1984), and the self-efficacy theory of Bandura (1977). Bandura (1977) theorized that “expectations of personal efficacy are derived from 4 principal sources of information: performance accomplishments, vicarious experience, verbal persuasion, and physiological states” (p. 191). These social cognition theories were designed to provide an account of how thoughts and beliefs influence health behavior and how human preparedness to act is a consequence of a complex of variables and/or stages. The social cognition paradigm neatly mirrors the zeitgeist, which holds that human behavior is controlled by cognitive processes, beliefs, and attitudes internalized in the mind of a responsible consumer. As early as 1978, biting criticism was launched by J. Smedslund (1978), alleging that Bandura’s theory of self-efficacy was really a set of commonsense, tautologous theorems of the type “All people are humans” (for a reply, see Bandura, 1978). The ancient Greek, Dale Carnegie, power of positive thinking idea that “to achieve, you must believe” is as old as the hills. A search on www.amazon.com yielded no fewer than 118 self-help books with a title similar to this. Self-efficacy enshrines within social cognitive psychology this ancient homily.

Ajzen’s (1985) theory of planned behavior (TPB) states that intentions to change a behavior are determined by a combination of attitude toward the behavior, subjective norms, and perceived behavioral control. The concept of perceived behavioral control originates from self-efficacy theory. In 2011, the ISI Web of Science database listed almost 3,000 articles mentioning the TPB, with the number per year rising continuously over the period 1978 to 2009.

In spite of its undoubtedly popularity, the social cognition paradigm has been the subject to mounting criticism on methodological or theoretical grounds (Ogden, 2003). The TPB in particular has been challenged (e.g.,
Brickell, Chatzisarantis, & Pretty, 2006; French, Cooke, Mclean, Williams, & Sutton, 2007; Mulholland & van Wersch, 2007), and systematic reviews have demonstrated only modest levels of empirical support (e.g., Armitage & Arden, 2007; Christian, Armitage, & Abrams, 2007). Armitage and Conner (2001) carried out a meta-analysis from a database of 185 studies published up to the end of 1997. Their analysis indicated that the TPB accounted for only 27% and 39%, respectively, of the variance in behavior and intention. Similarly, Webb and Sheeran’s (2006) meta-analysis showed that medium-to-large changes in intention were leading to only small-to-medium changes in behavior. The findings from meta-analysis suggest three main conclusions: (1) the TPB and similar theories provide an inadequate account of health and illness behavior; (2) in spite of the logic that intention causally precedes behavior, the intention–behavior gap remains a stubborn fact in health behavior; and (3) alternative approaches that consider non-social-cognitive factors in human choice, including emotions and feelings, are necessary.

Critics of social cognition theory have indicated several reasons why they have performed so poorly. Weinstein (1993, p. 324) summarized the then-current state of health behavior research as follows:

Despite a large empirical literature, there is still no consensus that certain models of health behavior are more accurate than others, that certain variables are more influential than others, or that certain behaviors or situations are understood better than others.

As already noted, some critics claim that social cognition theories are tautological and irrefutable (e.g., G. Smedslund, 2000; J. Smedslund, 1978). If valid, no real progress in understanding has followed or ever will follow the social-cognitive route. In a damning indictment, critical health psychologists Murray and Campbell (2003, p. 231) commented that social cognition theories have even hindered rather than helped efforts to stop the spread of AIDS:

Through persistently directing attention towards the individual level of analysis in explaining health-related behaviors, health psychology has contributed to masking the role of economic, political and symbolic social inequalities in patterns of ill-health, both globally and within particular countries. Thus, while some health psychologists may laud the innovativeness of subtle changes to the basic social cognition models of health behavior it can be argued that these very models may actually be hindering attempts at improving health.

The Community Perspective

Looking for alternative frameworks for health psychology is easier said than done. I previously advocated more consideration of the cultural, sociopolitical, and economic conditions setting the context for individual health experience and behavior (Marks, 1996, p. 7). As the trends in Figure 1.4 indicate, cultural differences, poverty, and spirituality are being increasingly studied, although to nothing like the same extent as self-efficacy. New theoretical concepts and ways of working are necessary if the global problems of AIDS, obesity, and tobacco are to be solved. There are simply insufficient health workers to provide individual care at the point of need. A community perspective offers the possibility of making the community the target for intervention rather than the individual. A helpful framework for a segment of community health work is that proposed by Lewin (1947), which has seen a revival in the form of participant action research (PAR) (Figure 1.6).

Reflecting the importance of social and economic structures, over the past decade, there has been increasing interest in developing community health psychology. This has been defined as “the theory and method of working with communities to combat disease and to promote health” (Campbell & Murray, 2004, p. 187). The accommodation approach focuses on processes within the community; the more critical approach aims to connect intracommunity processes with the broader sociopolitical context. A primary aim of critical community psychologists is:

to promote analysis and action that challenges the restrictions imposed by exploitative economic and political relationships and dominant systems of knowledge production, often aligning themselves with broad democratic movements to challenge the social inequalities which flourish under global capitalism. (Campbell & Murray, 2004, p. 190)

In devising strategies for social and community change, health psychologists are becoming more sophisticated about the various dimensions of communities and processes involved in encouraging participation in community activities. The activist orientation distinguishes it from other forms of community-based health interventions. McLeroy, Norton, Kegler, Burdine, and Sumaya (2003) distinguish four different forms of community-based health promotion: community as setting, community as target, community as agent, and community as resource. In this section, I illustrate the flavor of the community paradigm with three international examples of interventions in the sexual health domain.
Community-level approaches to sexual health mobilize skills and resources from communities who themselves can see that changes are necessary and who are willing to develop strategies for making those changes. Communities may consist of ethnic groups, neighborhood groups, or groups with particular social identities, such as men who have sex with men. The top-down approach of theoretical models, government-led programs, and campaigns are rejected in favor of bottom-up approaches based on personal relationships and social networks. The concept that there needs to be adolescent participation in the promotion of their sexual and reproductive health is enjoying widespread popularity as part of a broader shift toward participatory health promotion. Key policy statements by the World Health Organization (1997) endorse a participatory approach at the level of whole communities. The community approach is highly flexible and adapted from place to place, according to the particular community issues and needs. Three examples of community approaches to sexual health follow.

Sexual Health Promotion in Peru

Ramella and Bravo de la Cruz (2000) describe an adolescent sexual health promotion project in Peru called Salud Reproductiva para Adolescentes (SaRA), which was implemented in 15 communities in deprived rural and urban/marginal areas in the coastal, Andean, and jungle regions of Peru. The project operated at grassroots level in collaboration with existing community networks. SaRA’s goal is to encourage positive changes in adolescent sexual health by working with relevant social actors and social networks. In each of the communities, the project set up networks in the form of clubs. The clubs were created in open encounters jointly arranged by the SaRA team and local community networks. The clubs organize a range of social activities designed to nurture the network of adolescents and to embed it within its community by seeking collaboration and exchange with other social agents. Adolescents decide for themselves the nature and content of events, while the SaRA team facilitates assistance and collaboration from locally available services.
Clubs were given access to video cameras, photographic cameras, tape recorders, and paper and pencil. The clubs were thus encouraged to make use of these technologies in creating accounts of their activities, such as a football match, a visit to a health center, or a salsa party. The stories open up opportunities for adolescents to talk about pressing issues they feel and create a means of expression that can feedback into the adolescents’ reflections and understanding of themselves. These stories contribute to SaRA’s goal of promoting sexual health while helping adolescents to improve their communication skills and competence, which are central aspects of sexual health. In all but four of these communities, the clubs established themselves as key social players by becoming a social center for local adolescents. A second output indicator was the adolescent club members’ increased use of locally available health services and products. A third output was a substantial decrease (90%) in the level of unintended pregnancies among adolescent girls in SaRA. The project is ongoing.

HIV/AIDS Stigma Amelioration in South Africa

The leader of this project, Campbell, talks about HIV/AIDS stigma with the concept of dying twice: “If you have AIDS you die twice because the first thing that kills you is being lonely when everyone discriminates against you, even your family members. The second one is the actual death” (a young high school learner, quoted by Campbell et al., 2007). Addressing this issue from a psychosocial perspective within the community, Campbell and colleagues present a stigma amelioration model (SMA) designed to reduce HIV/AIDS stigma. They argue that stigma is a key driver of the epidemic “through the role it plays in undermining the ability of individuals, families and societies to protect themselves from HIV and to provide assistance to those affected by AIDS” (p. 404). The authors present a multilevel model of the roots of AIDS stigma in two South African communities.

The SMA model highlights the complex interplay of psychosocial factors, which generate stigma around AIDS. This project was carried out in two communities in KwaZulu, Natal, South Africa, in Entabeni, a rural community in a periurban area near Durban, where around 40% of pregnant women are HIV-positive. This area is a typical Zulu-speaking community in a patriarchal society, with high unemployment and poverty. In 2004, when the study was carried out, antiretroviral drugs were not available to the study communities. HIV/AIDS-related community organizations invited the researchers to assist them in acquiring more understanding of the social factors that were facilitating or hindering their work. Stigma is an obstacle to AIDS care in these African communities:

Families hide the person away from the community once they discover they have AIDS. They take him away from the community and we end up not knowing what has happened to that person. They don’t even allow him or her to go to the clinic or to seek out any help at all. (young woman, youth leader, quoted in Campbell et al., 2007)

Health workers reported that it was hard to persuade people to apply for AIDS grants when they kept their HIV status secret. Stigma might even deter people from asking for ARVT drugs once drug treatment took place. One hundred and twenty semistructured interviews, as well as focus groups, explored community responses to HIV/AIDS. The main drivers of stigma were found to be fear; lack of social spaces to engage in dialogue about HIV/AIDS; the link between HIV/AIDS, sexual moralities, and the control of women and young people; the lack of adequate HIV/AIDS management services; the way in which poverty shaped people’s reactions to HIV/AIDS; and availability and relevance of AIDS-related information.

Campbell et al., 2007 suggested four methods for ameliorating stigma in these regions:

1. Generate debate and discussion about how stigma fuels the fear that facilitates the epidemic— with many people too frightened to seek out information about how to protect their sexual health through the creation of social contexts where people with AIDS are treated with care, love, and respect.
2. Discuss stigma problems in group contexts, to help to empower people to identify their strengths, abilities, and resources.
3. Promote community ownership of the HIV problem to help bring about a sense of identification between community members and those who are suffering from HIV/AIDS.
4. Encourage participants to be creative about forging links with organizations that could help them manage HIV/AIDS more effectively.

Stigma amelioration could also be applied to other illness communities, including those with obesity, drug addiction, obstructive pulmonary disease, and mental illness.

Confronting HIV/AIDS and Its Links to the Alcohol Industry in Cambodia

The Hybrid Capacity Building Model (HCBM) of Lubek and Wong (2001), Lubek (2005), and collaborators is a
third example of a community-level HIV intervention. The context is that of attempting to reduce not the stigma of HIV/AIDS, but its actual transmission. The HCBM brings diverse stakeholders together, even when their interests initially appear conflicting, to help solve a shared problem. In rural Cambodia, where nonliteracy rates are as high as 75%, female workers face health and safety risks selling international beer brands (e.g., Heineken, Three Horses, Budweiser, Stella Artois, Beck’s, and Tiger) in restaurants. These “beer girls” are underpaid by about 50% and are sometimes forced to trade sex for money. Twenty percent are HIV-seropositive, quickly die, and are replaced by younger girls from the countryside. Beer girls must wear the uniforms of the international beer brands they sell in restaurants and beer gardens. The Siem Reap Citizens for Health, Educational, and Social Issues (SiRCHESI, 2006) organization, which embodies the HCBM, has been confronting the issues involved, using participatory action research (see Figure 1.6).

In 2002, beer girls were set a nightly sales quota of 24 cans or small bottles, each selling for $1.50 on average, totaling $36 worth of beer daily or $13,000 annually. In 2004 and 2005, Heineken and Tiger Beer promotion women were put on fixed salaries of around $55 per month, which is about half the income they need to support their families. One third of the women support children as single mothers, and 90% support rural families. About half become indirect sex workers, exchanging money for sex to supplement their income. Beer girls consume unsafe quantities of alcohol when working—over 1.2 liters of beer (about five standard drinks) nightly, 27 days a month (Schuster, 2006). This reduces condom use, increasing risks for HIV/AIDS and STIs. Condom use following beer drinking is lowered, and 20% of the beer promotion women in Cambodia are seropositive for HIV/AIDS (Lubek, 2005). In 2010, it was estimated that there were approximately 200,000 people living with HIV/AIDS (PLWHAs) in Cambodia, with 10,000 in Siem Reap.

A clone of the life-prolonging antiretroviral therapy (ARVT) costs approximately $360 per year. The annual wage of $600 to $800 means that ARVT is not an option for HIV-positive beer girls. Médecins Sans Frontières and other NGOs provide free clone ARVT for a small number of Cambodians with HIV/AIDS. Death can follow 3 months to 2 years after diagnosis. The spread of HIV/AIDS is accelerated by sexual tourism, poverty, and lack of condom use, and HIV seropositivity rates have averaged 32.7% (1995–2005) for brothel-based (direct) sex workers. Siem Reap is the largest tourist site in Cambodia, hosting 354,000 people in 2001 and over 1 million in 2004. Many of the male tourists are sex tourists. In 2001, 23 brothels were registered in the 100% condom-use program, employing 250 direct sex workers. An additional 350 indirect sex workers were beer promotion women or worked as massage workers and karaoke singers (Lubek, 2005). Infection patterns reflect a bridging pattern involving sexual tourists, indirect and direct sex workers, local men, and their wives and newborns. Married women, men, and young persons are increasingly at risk, with fewer than 10% of the estimated 10,000 persons living with HIV/AIDS in Siem Reap in 2006 receiving antiretrovirals. In 2006 to 2008, SiRCHESI partnered with three Siem Reap hotels in a hotel apprenticeship program. This removed women from risky beer-selling jobs, sending them every morning to SiRCHESI’s school to learn English, Khmer reading, health education, and social and life skills.

One primary prevention project started in 2006 to remove women from risky beer-selling jobs and trained them for safer careers inside the hotel industry. New advocacy, political, and policy-formation skills, and activism include trade union activities for beer sellers, meetings with government legislators, supplying data to ethical shareholder groups, and debating international beer executives in the press and scientific journals. Multiple actions were organized to tackle the issue at different levels:

- Workshops training women at risk for HIV/AIDS to be peer educators about health and alcohol overuse
- Workshops to prevent the sexual exploitation and trafficking of children
- Company sponsorship of HIV/prevention health education
- Fair salaries to enable the women to adequately support their dependents
- Monitoring voluntary HIV/AIDS testing (serology)
- Free antiretroviral therapy (ARVT) for “promotion girls” who are HIV positive
- Breathalyzer testing in bars
- Changes in community health behaviors and attitudes
- Fund-raising through the sale of fair trade souvenirs

SiRCHESI uses a multisectoral PAR approach to confront the HIV/AIDS pandemic in Cambodia. The PAR approach emphasizes empowerment of local women and others increasingly at risk, as well as development of a culturally and gender-sensitive health intervention and research program, which eventually can be made self-sustaining. This approach succeeds best by facilitating collaboration between grassroots organizations and
local and international corporate industries. All of these organizations need to take joint responsibility for the risk prevention of HIV if the objective to lower its spread is to be achieved. The HCBM provides a model for achieving this goal.

**Critique of Community-Level Models**

**Lack of Evaluation.** If we are to place any confidence in a health-care intervention, the ability of an intervention to improve the health of individuals suffering from a health risk or an illness needs to be objectively evaluated. Ideally, a similar robust level of proof is required for all types of intervention. However, the same high level of proof available for individual-level interventions is not feasible for the majority of community-level interventions. Community interventions are, by definition, unique to each particular set of community circumstances, and the intervention(s) designed in light of the circumstances arising as the various stakeholders influence what actually happens. A community intervention often feels messy, fluid, difficult to control, and certainly not amenable to a randomized controlled trial. It is almost impossible to run trials using matched controlled conditions in bottom-up interventions of the kind reviewed in this section. However, evaluation using other types of design is not precluded and should ideally be carried out; for example, processes and outcomes should be monitored and compared at different time points. Unfortunately, for many community projects, evaluation ends up being a low priority or tends to be overlooked.

**Lack of Detailed Description.** Another problem with the community approach is that community projects are often described in insufficient detail and clarity to enable people who were not directly involved to understand exactly what took place and how they could, if they wanted to, replicate the intervention at another time and place.

**Empowerment—Who Empowers Whom?** The idea of one group of people empowering others to do things that they otherwise could or would not do is a problematic concept. Who is to decide what it is exactly that the others should be encouraged to do? What right does the intervention group have to make this assumption? Who knows best what should be aimed for? Who are the power brokers, and how much control do they try to retain?

**Victim Blaming.** When community members are asked to participate in an intervention, their response can be quite variable. Participants can be perceived as an in-group or elite, and those who do not participate as an out-group. Nonparticipation can then act as a vehicle for victim blaming. The people in the in-group may well ask why others are not coming forward to join in and avail themselves of the organized events, which may be seen as a failure to help themselves.

**Unexpected Consequences.** Community change occurs as a consequence of a complex interplay of actors, circumstances, and actions. The aims and objectives may well be noble and righteous, but the consequences are not always predictable or certain. The outcome could possibly be to the benefit of some and to the detriment of others. A kind of methodological hubris may cause unintended harm through externally led intervention techniques such as PAR (Estacio & Marks, 2010).

**Qualitative Perspectives**

Qualitative research provides in-depth methods for analyzing and theorizing health and illness experiences. In principle, it offers a rich mine of data and theory for the development of health psychology as a subdiscipline. Figure 1.5 shows a substantial increase in research using qualitative methods over the 20-year period 1990–2009. I searched the ISI Web of Knowledge database using the terms: Topic="qualitative method" OR "interpretative phenomenological analysis" OR “discourse analysis” OR “grounded theory” OR “thematic analysis”) AND Topic="psychology” AND Topic="health”). A second search used the terms: Topic="qualitative method" OR “interpretative phenomenological analysis” OR “discourse analysis” OR “grounded theory” OR “thematic analysis”) AND Topic="illness”) AND Topic="psychology”). The total number of qualitative studies concerning psychology, health, and illness rose steadily from 13 studies in 1990 to 347 studies by 2008 (see Figure 1.5). The “qualitative turn” in all areas of health research is irreversible; the qualitative literature will grow steadily well into the future. We discuss this topic in more detail later.

Methods include interpretative phenomenological analysis (IPA), grounded theory, thematic analysis, and discourse analysis. Smith (1996) introduced IPA as a way of crossing the divide between cognition and discourse in health psychology. Smith drew the theoretical roots of IPA from phenomenology and symbolic interactionism. Following are two brief examples. Osborn and Smith (1998) used IPA to explore the personal experience of chronic benign lower back pain in which pain, physical impairment, and biological pathology are allegedly
only loosely correlated, and pain, distress, and disability are to some degree mediated by the meaning of the experience to the sufferer. Osborn and Smith carried out semistructured interviews with nine women suffering from chronic back pain and used the verbatim interview transcripts for an interpretive phenomenological analysis. The investigators reported four themes: “searching for an explanation,” “comparing this self with other selves,” “not being believed,” and “withdrawing from others.” The researchers concluded that the participants were unable to explain the persistent pain or to “reconstruct any contemporary self-regard.” They found that in certain situations the participants felt obliged to appear ill to conform to others’ expectations and that they treated their own pain as a stigma and tended to withdraw from social contact.

Seamark, Blake, Seamark, and Halpin (2004) explored the experiences of patients with severe chronic obstructive pulmonary disease (COPD) and their caregivers. Nine men and one woman with severe COPD and the caregivers of eight of the men, in East Devon, England, completed semistructured interviews that were analyzed using IPA. The emergent themes were “losses,” reflecting the loss of personal liberty and dignity and of previous expectations of the future; “adaptation,” strategies to cope with the effects of the disease; and “relationships,” related to both positive and negative aspects of contact with health professionals. Caregivers reported experiencing some of the same losses as the patients and appeared enmeshed with the illness. There was a significant decline in activities of daily life and social isolation for patients with severe COPD.

Brocki and Wearden (2006) provided a critical evaluation of the use of IPA in health psychology. They concluded that while IPA seems applicable in a wide variety of research domains, there is sometimes a lack of attention to the interpretative aspects of the approach.

Another leading set of procedures is concerned with grounded theory (Glaser & Strauss, 1967), a method for organizing data into a theory about how people think about a set of issues. A “rhetorical wrestle” developed, leading to two main approaches to grounded theory: Glaser’s (1999) approach and the Corbin and Strauss (1990) approach. For example, Schilder and colleagues (2001) studied the relationship between identity and health-care experiences (including antiretroviral therapy utilization) among HIV-positive sexual minority males. Data collection occurred through focus groups and interviews with 47 HIV-positive participants from three minorities: gay men, bisexual men, and transgender persons, gender identifying as female and/or living as women. Data were obtained on (a) general experiences with health care, (b) experiences with HIV antiretroviral therapies and issues surrounding access, and (c) adherence to these therapies and identity in relation to health care. The investigators saw three themes emerging from the data: “(1) the importance of sexual identity and its social and cultural context, (2) the differences in the health concerns between the sexual minorities and (3) a wide spectrum of experiences with the health-care system that provide information surrounding the access to and adequacy of health care.”

In a study of the origins of the desire for euthanasia and assisted suicide in people with HIV-1 or AIDS, Lavery, Boyle, Dickens, Maclean, and Singer (2001) interviewed 32 people with HIV-1 or AIDS in Toronto about their experiences of deliberation about euthanasia or assisted suicide and the meaning of these experiences. Grounded theory procedures were used to analyze the data. They found that the participants’ desire for euthanasia and assisted suicide were affected by two main factors: “disintegration,” which resulted from symptoms and loss of function, and “loss of community,” which they defined as “progressive diminishment of opportunities to initiate and maintain close personal relationships,” which resulted in perceived loss of self. The investigators concluded that participants saw euthanasia and assisted suicide as a means of limiting this loss of self.

Thomas and James (2006, p. 767) discuss three problematic issues with grounded theory: theory, ground, and discovery. They argue that these concepts “constrain and distort qualitative inquiry, and that what is contrived is not in fact theory in any meaningful sense.” These critics suggest that what materializes using grounded theory procedures is “less like discovery and more akin to invention.”

Another leading approach has been discourse analysis (DA). This analytic approach has allowed free exploration of the ways in which aspects of health and illness are constructed through language (e.g., Schou & Hewison, 1998). Two methods have evolved: traditional DA and Foucauldian DA. Using the traditional DA method, Hoffman-Goetz (1999) analyzed magazine cancer stories to search for “teachable moments” about cancer prevention and control among a predominant readership of Black women. Eleven full-length, personal cancer stories in Jet, Ebony, and Essence from 1987 to 1995 were analyzed. Six themes emerged: religiosity, cancer, fatalism, quality of life after diagnosis, interactions with medical
personnel, and treatment choices. The narratives in these women’s magazines emphasized religious beliefs in cancer survival and presented mixed attitudes toward White medical institutions. Mass media contribute to cancer survival discourse by helping to shape women’s knowledge and attitudes.

Salmon and Hall (2003) discussed the role of discourse concerning patient empowerment (PE) that constructs patients as active agents in managing illness and health care. They argued that discourse can best be understood by examining how it meets the needs of those who use it, whether patient or provider. Salmon and Hall suggested that PE discourse has the potential to conveniently allow clinicians to “withdraw from responsibility for areas of patient need that are problematic for medicine, such as unexplained symptoms, chronic disease and pain” (2003, p. 1969). Discourse is influencing “boundaries of medical responsibility,” which Salmon and Hall argued should be “subjects for, rather than constraints on, empirical research.”

Willig (2000) differentiated two ways in which an alternative, Foucauldian version of discourse analysis (FDA) can be applied. FDA method 1 has been used to deconstruct expert discourses of health and illness; FDA method 2 is used to determine the extent to which dominant discourses are reflected in laypeople’s talk about health and illness. Willig (1998) discussed lay constructions of sexual activity and their implications for sexual practice and sex education. She argued that most sex education uses language to communicate messages that construct “particular versions of reality” (1998, p. 383). Semistructured interviews with 16 heterosexual adults included questions about sexual risk taking within the context of HIV/AIDS. Willig’s (1998, p. 383) analysis identified lay constructions of “sexual activity” that, she suggested, could make AIDS education more effective by addressing “the wider discourses surrounding sexuality and sexual relationships.” The “wider discourses” are a key part of what we mean by culture as a core constituent of health experience and behavior, not as an optional add-on under a label such as “past experience.”

Yardley (2000) pinpointed a few dilemmas about how qualitative health research can be evaluated, specifically, what criteria are appropriate for assessing the validity of a qualitative analysis. Yardley made a case for applying the following criteria: sensitivity to context, commitment and rigor, transparency and coherence, and impact and importance. Chamberlain (2000) argued that qualitative researchers are in danger of reifying methods in the same way as colleagues in quantitative research. Meyrick (2006) described a simple, practitioner-focused framework for assessing the rigor of qualitative research. Her review indicated two core principles of quality: transparency and systematicity.

At present, the jury is still out regarding the ultimate contribution of qualitative research to the field of health psychology. Certainly, the methodology is full of promise, but the potential for a grand new theory is yet to be realized.

The Critical Perspective

Critical health psychology, an approach aiming to generate alternative theories (Marks, 2002, 2004, 2006) was the subject of an article by Hepworth (2006). Hepworth identified three philosophical phases in critical health psychology’s role in contributing to public and global health: rejection of reification (past), consensuality and subjectivism (present), and justice and fairness (future).

This article provoked a mixture of positive and negative reactions from international commentators. Bunton (2006) encouraged reflection and critique of health psychology’s applications in public health and what he called the “inseparability of psychology and politics”:

Behavior oriented health promotion has often relied on oversimplistic and over-deterministic models in which action emanates from individuals, not the social or economic structures they inhabit. Mainstream health psychology models are allied with official health ideology and policy, stressing self-control, self-regulation and responsible (low-cost) health citizenship. (Bunton, 2006, p. 343)

Maclachlan (2006, p. 361) suggested that the global health movement offers health psychologists an avenue to develop “a pragmatic approach to the interconnectedness of poor health and inequality,” especially in low-income countries. However, Lee (2006) argued that work to improve health on a global scale that aims to reduce inequities is being done, but not by health psychologists. Vinck and Meganck (2006) suggested that the important concerns of critical health psychology are better served by efforts to help mainstream health psychologists think and work more strongly from a critical perspective. Among other concerns, critical health psychologists have called for “actionable understandings of the complex individual–society dialectic underlying social inequalities” (Murray & Campbell, 2003, p. 236).
Perhaps the strongest inspiration for a new theoretical approach has come, not from Western academe, but from Martín-Baró (1994, p. 45, cited by Murray & Campbell, 2003):

If it is not the calling of the psychologist to intervene in the socio-economic mechanisms that cement the structures of injustice, it is within the psychologist’s purview to intervene in the subjective processes that sustain those structures of injustice and make them viable.

There are many injustices that require intervention. Whether the majority of health psychologists have the grit, courage, and determination to engage in such interventions is an open question.

A TAXONOMY FOR INTERVENTIONS

Designing and reporting an intervention study is a highly complex operation belied by the simplicity of available descriptions within the literature. A vast array of programs, interventions, and techniques can be delivered in a multitude of combinations, enabling millions of different interventions (Marks, 2009). Psychology as a discipline requires new heuristics for intervention research and reporting.

In medicine and health care, there is a large gap between what gets measured and what matters most to service users. Furthermore, reports of behavior change studies typically provide brief, opaque descriptions of what in reality may be complex interventions. These problems multiply to make meaningful progress a significant challenge. The problem is that there is no meaningful method of relating interventions for behavior change to any single theory or taxonomy. Within the context of social cognition theory, Bartholomew, Parcel, Kok, and Gottlieb (2001) described a method for intervention mapping in developing theory and evidence-based health education programs (Schaalma, Ruiter, van Empelen, & Brug, 2004). Yet, there is no accepted taxonomy for methods and techniques employed to carry out interventions to change behavior. This means that researchers do not know how to label what they have done in a way that communicates it in any precise manner.

A key issue in designing and reporting interventions is transparency. CONSORT guidelines for randomized controlled trials (RCTs; Moher, Schultz, & Altman, 2001) and the TREND statement for nonrandomized studies (Des Jarlais, Lyles, & Crepaz, 2004) were intended to bridge the gap between intervention descriptions and intended replications. These guidelines have driven efforts to enhance the practice of reporting behavior change intervention studies. Davidson and colleagues (2003) expanded the CONSORT guidelines in proposing that authors should report (a) the content or elements of the intervention, (b) characteristics of those delivering the intervention, (c) characteristics of the recipients, (d) the setting, (e) the mode of delivery, (f) the intensity, (g) the duration, and (h) adherence to delivery protocols/manuals.

Intervention studies are typically designed to compare one, two, or, at most, three treatments with a control condition of standard care, a wait-list control, a placebo, or no treatment. The standard designs are simple, pragmatic, and artificial because precious resources must be stretched across a large number of trials. The need for powerful study designs is a key requirement for both ethical and statistical reasons, which means sample sizes are critical and the number of arms to the study relatively small (typically two or three maximum). Rarely, if ever, does an intervention include only one technique, with practically all trials including two or more techniques in combination. If an intervention domain such as smoking has, say, 500 techniques, then there would be 2.5 million possible dyadic combinations, 124 million triadic combinations, and 62 billion tetrads. Which specific combination is used in any individual case, and in which specific sequence, depends on the subjective choices of the practitioner. There is no way for multiple billions of potential interventions to be evaluated, which means that the vast majority of practice has never been evaluated in the form in which it is offered. The pragmatic solution to intervention design is to assume that the individual components must have a supportive evidence base.

If interventions are described incompletely, it is not possible to (a) determine all the necessary attributes of the intervention, (b) classify the intervention into a category or type, (c) compare and contrast interventions across studies, (d) identify which specific intervention component was responsible for efficacy, (e) replicate the intervention in other settings, and (f) advance the science of illness prevention by enabling theory testing in the practice of health care.

One way to bring order to the chaos is to use a taxonomic system similar to those used to classify organisms or substances. Taxonomies for living things have been constructed since the time of Aristotle, and the periodic table in chemistry is the best known example of taxonomy. Recently, there has been interest in developing a taxonomy for health psychology interventions. Some researchers approached this issue by generating shopping
lists of interventions used in different studies. Abraham and Michie (2008) described 26 behavior change interventions, which they claimed provide a “theory-linked taxonomy of generally applicable behavior change techniques” (p. 379). However, no generic theory is available to generate such lists or to organize them. In reality, all we have is a list of practical issues that need solutions. Michie, Johnston, Francis, Hardeman, and Eccles (2008, Appendix A) produced a list of 137 heterogeneous techniques. Michie, Jochelson, Markham, and Bridle (2008) aimed to review the evidence base for the effectiveness of health behavior interventions for low-income groups to reduce smoking or unhealthy eating or increase physical activity. The resulting mismatch between the list and interventions actually used in practice led to false conclusions about effectiveness when statistics were run on the data (Marks, 2009). A simple list can never be a taxonomy.

An intervention taxonomy needs to be a systematic organization of all known program and intervention types, deconstructed into components consisting of all known techniques and subtechniques. A taxonomy with six levels is illustrated in Figure 1.7.

The taxonomy has six nested levels:
1. Paradigms, such as individual, community, public health, and critical
2. Domains, such as stress, diabetes, hypertension, smoking, weight, and exercise
3. Programs within a domain, such as smoking cessation, obesity management, stress management, and assertiveness training
4. Intervention types within a program, such as relaxation induction, imagery, planning, cognitive restructuring, imagery, and buddy system monitoring
5. Techniques within an intervention type, such as, within imagery, mental rehearsal, guided imagery, flooding in imagination, and systematic sensitization
6. Subtechniques within a technique, such as, within guided imagery, a variety of sensory modalities (sight, sound, smell, taste, touch, warmth/coldness), scenarios (e.g., beach, forest, garden, air balloon), delivery methods (e.g., spoken instruction, self-administered by reading, listening to audiotapes), settings (e.g., individual, group), and participant positions (e.g., supine, sitting on floor, sitting on chair)

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**Figure 1.7** Taxonomy of interventions
This taxonomy is capable of including all health psychology paradigms, domains, programs, intervention types, techniques, and subtechniques as defined with universal reference in the form of a tree diagram. The tree diagram enables a unique and fully transparent specification of every conceivable intervention, the sequence of their delivery, and the included subtechniques. As long as the designer is sufficiently specific, this taxonomic system enables any imaginative intervention to be constructed, delivered, evaluated, labeled, reported, and replicated in an unambiguous fashion. Each theoretical approach could thereby generate a different tree for different domains, and the various competitors can be empirically trialed and tested. This constitutes an ambitious program for health psychology, but without it or something similar, the current chaos in the field will prevail indefinitely.

CONCLUSIONS

Health psychology as a subdiscipline has existed for about 40 years. The focus on social cognition has been a cul-de-sac to nowhere. For progress to occur, health psychology must take a U-turn from the study of what must be true (tautologous pseudomodels) to the study of what might be (helpful explanations), from what individuals do and say (behavior) to what that behavior means (contextuality), from social cognitions (box ticks) to personal subjectivities (experience of health and well-being), from the status quo (demographics) to social injustice (structures of power and inequality). The qualitative turn promises to lead the way with new insights, theories, and understandings. We must have the courage to interpret and theorize about what people tell us about their experiences of health, illness, and health care. If not, we are missing a golden opportunity. How, when, or if this change will happen is a matter for us all.

REFERENCES


24 Overview


Smedslund, G. (2008). All bachelors are unmarried men (p < 0.05.


