

Taking the Pulse of Undergraduate Health Psychology: A Nationwide Survey

Amy Badura Brack, Kutlo Kesitilwe, and Mark E. Ware Creighton University

We conducted a random national survey of 100 doctoral, 100 comprehensive, and 100 baccalaureate institutions to determine the current state of the undergraduate health psychology course. We found clear evidence of a maturing course with much greater commonality in name (health psychology), theoretical foundation (the biopsychosocial model), and course content (e.g., smoking, heart disease, stress, chronic illness) than reported in the past. Also indicative of growth, 33% of all schools compared offered the course compared to only a quarter of schools offering the course 2 decades ago. Finally, we discuss the current state of health psychology and summaries of course content and teaching strategies.

Health psychology is primarily concerned with the overlap between psychology and medicine. Health psychology incorporates the biopsychosocial model, which understands health and illness are influenced by a combination of biological, psychological, and social factors (Engel, 1977, 1980). The field of health psychology has four major goals. Matarazzo (1980) offered three goals in his initial definition of health psychology as the discipline dedicated to "the promotion and maintenance of health, the prevention and treatment of illness, and the identification of etiologic and diagnostic correlates of health, illness, and related dysfunction" (p. 815). Matarazzo (1982) then amended his definition to include a fourth goal—improvement of the health care system and health policy information as a result of a vote of the early members of American Psychological Association's Division 38 (Health Psychology).

Health psychology pioneer Shelley Taylor stated that health psychology is an important part of the psychology curriculum as basic to the undergraduate curriculum as abnormal or social psychology (Rich, 2000). She indicated that undergraduate students tak-

ing health psychology typically continue in psychology, neuroscience, medicine, or social work. Taylor also astutely noted that health psychology is an excellent fit with recent interest in positive psychology (e.g., Seligman & Csikszentmihalyi, 2000).

Historically, Dorsel and Baum (1989) reported findings from a 1986 survey of undergraduate programs in psychology (receiving 460 responses) indicating that 24% of schools offered health psychology, 3% offered a course that included health psychology concepts, and 73% responded that they did not offer the course. Sarafino (1988) conducted a national survey (receiving 308 responses) and reported that 35% of universities with graduate programs, 24% of 4-year institutions, and only 9% of 2-year programs offered health psychology. Sarafino (1991), in collaboration with Division 38 (Health Psychology), surveyed approximately 60 known instructors of health psychology and received roughly a 40% response rate. Respondents returned course syllabi, outlines, and supporting materials. Sarafino concluded that most course descriptions focused on examining how biological, psychological, and social factors affect (a) health promotion and illness prevention; (b) treatment for medical problems; (c) coping with stress and pain; and (d) recovery, rehabilitation, and adjustment of patients with serious

Aside from these foundational pieces, other published pedagogical research on teaching the course is scarce. *Teaching of Psychology* (*ToP*) published an article on teaching an undergraduate health psychology course with lab more than a decade ago (Tritt, 1993). Ten years later, *ToP* published a paper by Sumner (2003) describing a health psychology assignment of developing a family health history and resulting action plan for health maintenance. Upton and Cooper (2003) described the development of online health

psychology teaching materials and more recently (Upton & Cooper, 2006) described the further development of their online material into interactive modules. The literature has also charged health psychology to incorporate aging (Sherman, 2003), gender, and multicultural issues (Landrine & Klonoff, 2003).

In this article we review health psychology offerings, course content, and teaching methods in the new millennium using a random national sample of undergraduate colleges and universities. This information should be useful for instructors and potential instructors of health psychology to design and implement undergraduate health psychology courses.

Method

Participants

We randomly sampled and examined 100 catalogs from three institutional types: (a) doctoral/research universities—extensive and intensive (n = 262), (b) master's (comprehensive) colleges and iniversities (I & II; n = 611), and (c) baccalaureate colleges (liberal arts and general; n = 549). The classifications were based on data from the Carnegie Classification of Institutions of Higher Education (http://www.carnegiefoundation.org/Classification). Because 2-year colleges often lack psychology departments and are not likely to offer such specialized courses, we did not include 2-year colleges in this study.

Procedure

We used an online source of catalogs, College-Source (http://www.collegecatalogs.org/home.asp), as our archival database. We examined undergraduate catalogs from each sampled school to determine whether that college or university offered undergraduate courses in health psychology or behavioral medicine, which were the most common titles according to previous research (Dorsel & Baum, 1989). Important to our methodology, using catalogs to determine offerings ensured sampling free of response bias,

¹The 2000 Carnegie Classification includes all colleges and universities in the United States that are degree-granting and accredited by an agency recognized by the U.S. Secretary of Education. The 2000 edition classifies institutions based on their degree-granting activities from 1995–1996 through 1997–1998.

but using only the titles of health psychology and behavioral medicine might have omitted courses with alternative titles.

To achieve the goal of viewing catalogs of 100 randomly selected schools from each institutional type, we sampled every second doctoral, sixth comprehensive, and fifth baccalaureate school listed in College-Source until we obtained 100 schools for each institution type. When the online source did not contain a catalog for the nthschool, we selected the next school in the list. Forty-three doctoral, 37 comprehensive, and 25 baccalaureate schools offered an undergraduate health psychology (or behavioral medicine) course. Employing our methods, most schools in our sample (93.4%) listed the course as health psychology, so we use that title in this article. However, we recognize that the seven identified courses titled behavioral medicine (6.6%) might reflect a more biological and behavioral focus.

If a school listed the course, we obtained the name of the Psychology Department chair or the name of the course instructor from the catalog. We sent a cover letter and questionnaire to the appropriate person and requested information about the course. After accounting for seven returned but not completed surveys, we had an overall response of 31% (30 completed surveys). Specifically, our response rates were 23% for doctoral (n = 10), 38% for comprehensive (n = 14), and 24% for baccalaureate schools (n = 6).

Materials

Our questionnaire assessed the role of the health psychology course at respondents' schools, including whether the course was (a) also taught at the graduate level, (b) a required or elective course, and (c) able to fulfill any university requirements. We also asked how often the course was offered at the undergraduate level.

Another section of the questionnaire asked which topics instructors covered. The questionnaire provided a list of 37 possible topics, and respondents checked every topic they taught. We generated this list of topics by reviewing the content of four health psychology texts (Brannon & Feist, 2000; Friedman, 2002; Straub, 2002; Taylor, 2003) and adding any additional topics taught in the first author's class. Respondents could also write a free response.

The questionnaire also requested the instructor's teaching strategies using a checklist. We developed this list based on standard instructional strategies and the published pedagogical research on health psychology. We listed 13 strategies and instructors could write

Teaching of Psychology

a free response. Finally we asked instructors to specify any ancillary materials they found particularly useful for teaching undergraduate health psychology.

Results

Overall, 43% of responding schools offering health psychology at the undergraduate level also offered the course at the graduate level. Most schools (93%) considered health psychology as a psychology elective, and most schools (83%) did not require the course in the major. In 37% of responding schools, health psychology met a college or university requirement in addition to earning hours toward graduation. When asked how frequently their institution offered undergraduate health psychology, 10% reported every semester, 63% every other semester, 13% every other year, and the remaining 13% of institutions offered the course occasionally.

This study ascertained which topics instructors frequently taught in undergraduate health psychology courses. Most instructors reported teaching the biopsychosocial model, chronic illness including heart disease and AIDS, stress and psychoneuroimmunology, and health-promoting behaviors such as exercise and weight management and health-compromising behav-

Table 1. Percentages of Respondents Covering Topics in Health Psychology Classes

Topic(s)	%
Biopsychosocial model; heart disease; smoking	93
Chronic illness; hypertension; stress	90
Adherence; AIDS/HIV; cancer	87
Alcohol/drugs; exercise; patient-provider	
relationship; weight control	83
Behavior modification; psychoneuroimmunology	80
Body systems; eating disorders; personality	
and disease; stroke	77
Chronic pain; health care utilization; terminal illness	73
Diabetes; pain management techniques	70
Relaxation training; stress management	67
Aging and health; biofeedback	63
Hospitalization	58
Grief and loss; occupational stress	53
Arthritis	50
Accidents/safety	47
Sleep	40
Other sexually transmitted diseases	37
Dementia	30
Other topics	27

iors such as smoking and alcohol abuse. Table 1 lists the percentages of courses containing each topic.

Finally, we also determined which instructional methods instructors typically used in teaching the course. Most instructors used lecture (97%), discussion (87%), and video (77%) to provide information and assessed student progress using writing assignments (97%), examinations (97%), and student presentations (73%). Of interest, however, many instructors also used personal health change assignments (53%), case studies (50%), and service learning approaches (10%) specific to health psychology.

Some instructors mentioned useful ancillary materials for the undergraduate health psychology class. The recommended materials included empirical articles, videos (e.g., "On Our Own Terms: Moyers on Dying," Owen, 2000), measures of wellness and stress, guest speakers, anatomical models, Web sites, and study guides.

Discussion

The results of our study indicate that the undergraduate course in health psychology is alive and well as it begins to mature and become more commonplace. The first finding of interest stems from the methodology of the study. Based on 100 randomly selected schools from each educational classification, schools from different classifications offered the course at different frequencies, with 43% of doctoral, 37% of comprehensive, and 25% of baccalaureate schools offering the course. Using a weighted average based on our random sampling, approximately 33% of American colleges and universities offer undergraduate health psychology.

Historically, Dorsel and Baum (1989) reported that 24% of schools offered the course, suggesting that our finding of 33% indicates notable growth for the course. Sarafino (1988) reported that 35% of universities with extensive graduate programs offered health psychology compared to our 43% of doctoral schools, and he reported that only 24% of 4-year colleges offered health psychology compared to our 37% for comprehensive schools and 25% for baccalaureate schools. Also of note, Sarafino sampled only schools with enrollments over 5,000 students, suggesting that he might have excluded smaller schools, likely to have fewer specialty course offerings, from his study. Especially considering the scope of previous surveys, our work indicates obvious growth for the health psychology course during the last two decades.

Another important methodological distinction between the current and earlier studies is that the older studies relied on volunteers to return their questionnaires. A reasonable consideration is that schools offering the course were more likely to participate in the study, which might have inflated historical rates. Our methodology using online college catalogs was more conservative because we did not introduce the possibility of a selection bias into our numbers. In fact, if our rates err, they err on the low end because we searched only for courses entitled health psychology or behavioral medicine, and we might have missed similar courses with other names.

Because the biopsychosocial model is one of the most taught topics in of health psychology today, the pedagogical record regarding this model is telling. Dorsel and Baum (1989) did not mention the biopsychosocial model at all in their article. Sarafino (1988) concluded that health psychology content was 25% behavioral, 22% biological and physiological, 17% cognitive, 15% social, 10% developmental, and 5% psychodynamic. Tritt (1993) mentioned facing many competing models for the course, indicating that he settled on the biopsychosocial model for his course. Our study indicated that 93% of respondents taught the biopsychosocial model, making that model the most frequently taught concept alongside smoking and heart disease.

Our study revealed much more uniformity in the maturing field, with 93.4% of schools listing the course under the name health psychology and only 6.6% calling it behavioral medicine, as compared to 34% and 20%, respectively, in Dorsel and Baum's (1989) study. The trend clearly supports the name health psychology to a much greater degree than in the 1980s, as does the burgeoning health psychology textbook market, with revised and new books using the health psychology moniker.

We also documented increased standardization of content as compared to historical rates with 19 of 37 topics taught by more than 75% of instructors and 33 of 37 topics taught 50% or more of the time. Some notable additions to the most popular topics in the last 20 years include the biopsychosocial model, AIDS/HIV, cancer, alcohol/drugs, exercise, patient–provider relationship, and psychoneuroimmunology. At least 80% of our respondents taught all of these topics, but fewer than 25% of Dorsel and Baum's (1989) respondents' syllabi listed these topics. The amount of uniformity in current course content is impressive, especially given the disparate nature of early content.

In conclusion, this study examined undergraduate health psychology and showed that the course is healthy and well developed. The name, foundational model, and course content have found considerable common ground, reflecting maturity in the course. Health psychology is offered more frequently than it was nearly two decades ago, reflecting robustness in support for the course. Our findings should aid current and future instructors in developing and honing the undergraduate health psychology course. Finally, we refer readers to the American Psychological Association Division 38, Health Psychology Web site (http://www.health-psych.org/), which offers useful teaching aids such as typical course objectives and sample syllabi.

References

Brannon, L., & Feist, J. (2000). Health psychology: An introduction to behavior and health (4th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Dorsel, T. N., & Baum A. (1989). Undergraduate health psychology: Another challenge for an ambitious field. *Psychology and Health*, 3, 87–92.

Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129–136.

Engel, G. L. (1980). The clinical application of the biopsychosocial model. *American Journal of Psychiatry*, 137, 535–544

Friedman, H. S. (2002). *Health psychology* (2nd ed.). Upper Saddle River, NJ:Pearson Education.

Landrine, H., & Klonoff, E. A. (2003). Diversifying health psychology: The sociocultural context. In. P. Bronstein & K. Quina (Eds.), *Teaching gender and multicultural awareness: Resources for the psychology classroom* (pp. 125–136). Washington, DC: American Psychological Association.

Matarazzo, J. D. (1980). Behavioral health and behavioral medicine: Frontiers for a new health psychology. *American Psychologist*, 35, 807–817.

Matarazzo, J. D. (1982). Behavioral health's challenge to academic, scientific, and professional psychology. *American Psychologist*, 37, 1–14.

Owen, E. (Producer). (2000). On our own terms: Moyers on dying [Television series]. New York: WNET.

Rich, G. J. (2000). Positive health psychology: An interview with Shelley Taylor. *Teaching of Psychology*, 27, 292–295.

Sarafino, E. P. (1988). Undergraduate health psychology courses. *The HealthPsychologist*, 10(3), 2.

- Sarafino, E. P. (1991). *Teaching undergraduate health psychology*. Washington, DC:American Psychological Association, Committee on Education and Training, Division 38 of Health Psychology.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.
- Sherman, A. M. (2003). Infusing aging content into health psychology courses. In S. K.Whitbourne & J. C. Cavanaugh (Eds.), *Integrating aging topics into psychology:* A practical guide for teaching (pp. 123–139). Washington, DC: American Psychological Association.
- Straub, R. (2002). Health psychology. New York: Worth.
- Sumner, K. E. (2003). Constructing a family health history to facilitate learning in a health psychology seminar. *Teaching of Psychology*, 30, 230–232.
- Taylor, S. E. (2003). *Health psychology* (5th ed.). Boston: McGraw-Hill.

- Tritt, D. G. (1993). Teaching an undergraduate lecture/ research course in health psychology. *Teaching of Psychology*, 20, 21–28.
- Upton, D., & Cooper, C. D. (2003). Online health psychology: Do students need it, use it, like it and want it? *Psychology Learning & Teaching*, 3, 27–35.
- Upton, D., & Cooper, C. (2006). Developing an online interactive health psychology module. *Innovations in Education and Teaching International*, 43, 223–231.

Note

Send correspondence to Amy Badura Brack, Department of Psychology, Creighton University, Omaha, NE 68178; e-mail: abadura@creighton.edu



Copyright of Teaching of Psychology is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.

