

DOCUMENT RESUME

ED 462 051

HE 034 676

AUTHOR Owen, T. Ross  
TITLE Student and Employee Wellness in Higher Education: A Literature Review.  
PUB DATE 2002-02-01  
NOTE 39p.  
PUB TYPE Information Analyses (070)  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS Adults; \*College Students; \*Health Behavior; Health Education; Health Programs; Higher Education; \*Holistic Approach; Literature Reviews; School Health Services; \*Wellness

ABSTRACT

This paper reviews the literature related to wellness. Wellness is reviewed in terms of definitions, theoretical perspectives, and research approaches. The definitions of wellness by six theorists are outlined. Regardless of definition chosen, today's conception of wellness has been fostered by disillusion with traditional medicine and the growing self-care movement. Recent interest in a holistic approach to life supports concerns with wellness and wellness readiness. Both qualitative and quantitative measures of wellness can be found in the literature, and both research approaches tend to focus on the wellness activities of employees and students, especially college students. Wellness centers and associated facilities are becoming more common on college and university campuses. (Contains 92 references.) (SLD)

Reproductions supplied by EDRS are the best that can be made from the original document.

# Student and Employee Wellness in Higher Education: A Literature Review

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

T. Owen

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

**T. Ross Owen**

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it.

Minor changes have been made to  
improve reproduction quality.

• Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

10034616

**STUDENT AND EMPLOYEE WELLNESS IN HIGHER EDUCATION:  
A LITERATURE REVIEW**

T. Ross Owen, Ed.D.  
Assistant Professor of Adult and Higher Education  
Morehead State University  
UPO Box 677  
150 University Boulevard  
Morehead, KY 40351  
606-783-2154  
r.owen@moreheadstate.edu

*February 1, 2002*

Health has historically meant the absence of disease. But our expectations of a reasonable quality of life have surpassed that of merely existing disease free. Today we aspire to a higher level of health, often referred to as wellness (Byer & Shainberg, 1995). Wellness generally entails engaging in attitudes and behaviors that improve one's quality of life.

This paper reviews the literature related to wellness. Wellness is reviewed in terms of definitions, theoretical perspectives, and research approaches.

**Defining Wellness**

The World Health Organization defined health as "a state of complete physical, mental, and social well-being, and not merely the absence of disease" (1947, p. 29). According to Edlin and Golanty (1992),

this definition is so broad and covers so much that it is said by some to be meaningless. But its universality is exactly right. People's lives, and therefore their health, are affected by everything they interact with-- environmental influences such as climate; the availability of nutritious food, comfortable shelter, clean air to breath, and pure water to drink; and other people, including family, lovers, employers, coworkers, friends, and associates of various kinds. (p. 5)

The definitions of wellness espoused by the following people will be reviewed: Halbert Dunn, Donald B. Ardell, William H. Hettler, Barbara Montgomery Dossey and Lynn Keegan, John W. Travis and Regina Sara Ryan, and J.J. Pilch.

### **Halbert Dunn**

Dunn's (1961) definition of wellness is credited with inspiring others to think of wellness in terms of an integrated method of functioning. That is, to think of the total individual--the body, mind, and spirit--as a functioning reality. According to Dunn, "the integration of the self, which is so essential to the state of high-level wellness, can best be achieved when the body is in balance--when the energy forces of the body are free to flow where they will, to reach equilibrium" (p. 135). It is the self which gives us "the seat of choice,

the reason for choosing" (p. 125). Tenants of Dunn's thinking can be traced to ancient Greek and Chinese philosophy.

**Donald B. Ardell**

Lifestyles characterized by high-level wellness are the alternative to doctors, drugs and disease (Ardell, 1977). In addition, people expect too much from traditional medicine and too little from themselves. According to Ardell,

[w]ellness has five dimensions: self-responsibility, nutritional awareness, stress management, physical fitness, and environmental sensitivity. Within each of these areas, there exists a wealth of information that you can evaluate and apply to your life--as appropriate. Take what fits-- and pass on the rest. Avoid getting trapped in the 'swallow-it-whole' syndrome. (p. 1)

Furthermore, according to Ardell,

[a]ll dimensions of high level wellness are equally important, but self-responsibility seems more equal than all the rest. It is the philosopher's stone, the mariner's compass, and the ring of power to a high level wellness lifestyle. Without an active sense of accountability for your own well-being, you won't have the necessary motivation to lead a health-enhancing lifestyle. (p. 102)

**William H. Hettler**

Hettler (1980) encouraged a holistic approach to wellness that emphasized change and effective daily decision making. His holistic framework included the following six dimensions: intellectual, emotional, physical, social, occupational, and spiritual. According to Hettler, successful choices are influenced by an individual's self-concept and the parameters of his or her culture and environment. Wellness is "an active process through which the individual becomes aware of and makes choices toward a more successful existence . . . a positive approach to living--an approach that emphasizes the whole person." (Hettler, 1980, p. 77).

**Barbara Montgomery Dossey & Lynn Keegan**

Wellness is a continual process of evolution by which an individual increases his or her awareness, purpose, quality of life, and uniqueness in six areas of human potential (Dossey & Keegan, 1988). These areas include the physical self, the mental self, emotions, spirituality, relationships, and choices. Together "they comprise the body-mind, the single integrated entity of one's total psychophysiologic experience" (p. 12). One area is no more important than another. However, "[i]f one area of our human potential is left undeveloped, one has the feeling that things are not as good as they could be" (p. 20). When one is striving to develop in all areas, a sense of

wholeness emerges. Life becomes more exciting, rewarding, and fulfilling. The whole person is able to recognize choices even when frustrations arise. According to Dossey and Keegan, "[a]s we take responsibility for making effective choices, then the necessary changes occur in our lives. This then places us in the position to clarify our life patterns, purposes, and processes" (p. 3). To Dossey and Keegan, wellness not only means behaving healthfully but also entails a fundamental shift in thinking.

**John W. Travis & Regina Sara Ryan**

Travis and Ryan (1988) are credited with depicting health as a continuum from premature death to total wellness. In the middle of their two extremes is a middle, or neutral point. Moving from the midpoint to the left depicts a progressively poorer state of health. Moving from the midpoint to the right depicts an increasing level of wellness. Practitioners of traditional medicine target the area of the continuum ranging from neutral to premature death. Whereas wellness education can range from any point on the continuum to total wellness. To Travis and Ryan, wellness includes the dimensions of self-responsibility and love, breathing, sensing, eating, moving, feeling, thinking, playing/working, communicating, sexuality, finding meaning, and transcending. Travis and Ryan essentially

believe that wellness is achieved by getting to know oneself and perceiving oneself as growing, learning, and changing.

**J.J. Pilch**

Pilch's definition is almost entirely spiritually-based. According to Pilch (1989), wellness is

a lifestyle that is based on an experience of God and shaped in response to that experience. This lifestyle views and lives life as purposeful and pleasurable, seeks out life-sustaining and life-enriching options that are freely and personally chosen at every opportunity. It enhances self-esteem and continually challenges one's values, striving always to sink ever-deeper roots into spiritual values and religious beliefs. (p. 5)

The general idea of wellness lends itself to being interpreted differently by different people. For instance, Dunn (1961) stressed the integration, balance, and ultimate equilibrium of the total individual. Ardell (1977) emphasized stress management, medical self-care, and self-responsibility. Hettler (1980), Dossey, and Keegan (1988) were interested in human potential from a holistic perspective. Dunn, Dossey, and Keegan recognized choice as having power in people's lives. Travis and Ryan (1988) are responsible for illustrating health and wellness as dichotomous. And Pilch (1989) emphasized responsiveness to God's influence. Yet there are basic tenants



that occur throughout all the afore mentioned definitions of wellness. Recurring themes include self-awareness and personal responsibility, an ultimate goal of self-actualization, an emphasis on process and growth, and the integration of mind, body, and spirit (Light, 1993).

### **Theorizing Wellness**

Today's conception of wellness has been fostered by disillusion with traditional medicine and a growing self-care movement (Clark, 1986). Practitioners of traditional medicine treat the symptoms of disease. Self-care entails the prevention of disease. In 1990 the U.S. Department of Health and Human Services published Healthy People 2000: National Health Promotion and Disease Prevention Objectives. It gave credit to lifestyle factors for having the greatest influence upon disease and accidents. Healthy People 2000 is evidence of an increasing awareness of issues concerning health and wellness, holism, wellness readiness, and social support.

### **Health & Wellness**

The terms health and wellness have been used interchangeably (Eddy, Bibeau, Glover, Hunt, & Westerfield, 1989; Hamrick, Frankle, & Crase, 1990; Pender, 1987; Petosa, 1984). However, there are distinguishable differences between health and wellness. Health literature develops from medically-

allied disciplines and is the basis for many government-supported social policies. The disciplines associated with health include health education, health promotion, nursing, behavioral science, public health, nutrition, physical education, and occupational health (Light, 1993). Some wellness literature has strong spiritual and psychological foundations that emphasize humanistic efforts to change the self. Wellness also has ties to psychology, sociology, the humanities, and religion (Light, 1993).

The writings of Rogers (1961), Bandura (1977), and Maslow (1968) have influenced the concept of wellness. Psychologists and sociologists believe that the potential for growth is greatest in nurturing environments. Humanists believe that "the will to grow, to self-actualize, is an innate drive. The drive pushes humans to find meaning in life, to find unity in experiences, and to actualize their potential" (Light, 1993, pp. 28-29). Persons who believe that spirituality provides meaning and direction in life enable themselves to grow in their quest for meaning and a higher quality of life (Anspaugh, Hamrick, & Rosato, 1994).

Carlyon (1984) said that health professionals are not qualified to facilitate wellness activities because of their inability to distinguish between wellness promotion and health promotion. According to Carlyon, "wellness promotion tasks are

primarily social, philosophical, and spiritual--they are not medical or public health tasks. Health professionals are almost totally unprepared to understand or carry out such tasks" (1984, p. 28). Carlyon furthermore suggested that health professionals consider wellness promotion activities to be unconventional and thus off limits.

To Carlyon, the goals of wellness include self-actualization, personal fulfillment, wholeness, and high-quality living. Achieving the goals of wellness requires "accepting the truth. . . [and] making fundamental changes in society and in ourselves and these changes cannot be effected through diet and exercise" (1984, p. 29). Carlyon encouraged readers to look inward instead of outward in search of humankind's noblest possibilities. According to Greenburg, "[t]he learner is the one who knows the totality and essence of the learner best" (1985, p. 405). Greenburg also recognized that "health educators not employing the learners themselves as partners in the learning process will have great difficulty in accomplishing any holistic--wellness--goal" (1985, p. 405).

### **Holism**

Before the mid 1900s, viruses, bacteria, and parasites were the leading causes of death in the United States. It was virtually impossible to prevent many diseases because the appropriate immunizations and vaccines had not been discovered.

It has been predicted that by the year 2000, most illnesses will be caused by day-to-day living habits (Edlin & Golanty, 1992, p. 12). In many instances, we will make ourselves sick by the way we live.

In increasing numbers, physicians are reporting that patients are not only feeling sick but are also showing no symptoms of any underlying physical problem. That is, "the sick feelings and the symptoms are the result of an emotionally upsetting life situation" (Edlin & Golanty, 1992, p. 12). It appears that tension, worry, frustration, and anger are predisposing people to stress-related illnesses classified as chronic and degenerative. Few physicians are trained to deal with emotional problems, and very little can be done medically to help someone with a chronic degenerative disease. According to Edlin & Golanty (1992),

the only effective way to deal with these diseases is to prevent them, which in many instances involves improving living habits . . . . Personal responsibility for health involves establishing attitudes and behaviors that promote positive wellness . . . . If individuals accept this responsibility, they will be free from illness much more of the time. (p. 13)

The belief that life should be viewed in its totality has become a key inspirational principle among survivors of chronic

and degenerative diseases (McDowell, 1989). This belief is intended to affect all aspects of life including health, politics, education, economics, spirituality, work, leisure, family, environment, science, technology, and the arts. Life is not meant to be measured by the functioning of its parts as independent entities. Instead, "life is like some large system operating as a function of the interdependent relationship of subsystems" (McDowell, 1989, p. 17). Holism is "a philosophy that views everything in terms of patterns of organization, relationships, interactions, and processes that combine to form a whole" (Dossey & Keegan, 1988, p. 5). According to Dossey and Keegan,

[w]holeness can be present when one has high levels of wellness and also when one has known disease/disability or is in the process of dying. Wholeness is a process and is present when we view ourselves as an open living system in a tapestry of relationships and events. Our actions have an effect on our body-mind-spirit. (p. 5)

The way to perceive life is not to analyze its separate components. The consequence of such an analysis is a fragmented understanding of how life's components synergistically function as a whole.

Helping professionals often overlook the value of interdependent life forces and their collective impact on

individuals and society. Accurate perceptions of life in its totality await those who understand what holism entails. McDowell said that holism "entails a great deal of personal responsibility for our actions, and a great deal of respect toward the whole individual by professional helpers" (1989. p. 17). Vocational specialists, health specialists, spiritual specialists, education specialists, guidance specialists, leisure specialists, and family specialists are considered by McDowell to be professional helpers.

The role of holism in the teaching-learning process has been debated by professional education specialists. Poplin (1988), Heshusius (1989), and Iano (1990) advocated the application of holistic principles to research, assessment, and intervention in teaching and learning. They furthermore argued that the positive approach to teaching and learning reduces homo sapiens to purely reactionary mammals, thus disregarding humankind's ability to consciously adapt. Warner (1993) added to the discussion by offering Bhasker's (1989) concept of "critical realism," e.g., the theoretical identification of cause-effect relationships, as an alternative to holism and positivism. Isaacson (1993) then responded to Warner's comments on positivism, critical realism, and holism by suggesting that relationships, predictions, and causes in the natural and social sciences be studied from a systematic approach.

Holists Poplin (1988), Heshusius (1989), and Iano (1990) argued against the positivism paradigm and on behalf of subjective holism. Advocates of subjective holism believe: (a) that individuals are not passive, reactive organisms, (b) that the actions of individuals and societies cannot be controlled or predicted, and (c) that educational experiences can be characterized as individually and socially meaningful. Pure positivists believe that knowledge can only be gained through empirical, or scientific research.

Warner (1993) advocated critical realism as an alternative research approach to holism or positivism. Critical realism refers to the unity of method that exists between the natural and social sciences (Bhaskar, 1989). The natural and social sciences are similar with respect to their logic, but at the same time have objects of inquiry that are ontologically different. To the critical realist, "the goal of science is the theoretical identification of things and their causal powers" (Warner, 1993, p. 312). Critical realism is different from positivism in that critical realism recognizes both the subjective and the social aspects of scientific inquiry. Compared to critical realism's nonpositivist appreciation for scientific inquiry, "[holism] can degenerate into a full-blown idealism that undervalues or ignores the important role that

science can play in solving the problems we face" (Warner, 1993, p. 311).

Isaacson (1993) narrowed the philosophic gaps between holism, critical realism, and positivism by further lessening the distinction between the natural and social sciences. According to Isaacson, "education provides many examples of natural phenomena explained in terms of social or behavioral outcomes" (1993, p. 326). Human behavior is intentional and complex. Any systematic approach to studying human behavior has the potential to identify causal mechanisms and predictable regularities that can help researchers better understand whole participants. The relationship between researcher and participant has roots in both the natural and social realms. By perceiving wholeness in participants' lives, researchers as practitioners are thus able to facilitate wellness readiness.

### **Wellness Readiness**

According to Barton, "wellness is an individual self directed process the foundation of which is composed of routine day to day behaviors. The cumulative effect of these behaviors is either positive or negative . . . . These day to day behaviors are the responsibility of the individual" (1990, p. 23). Thus, wellness readiness refers to one's general predisposition toward daily incorporation of wellness behaviors into one's lifestyle (Barton, 1990). Individuals are ready to



voluntarily change their wellness behaviors when four conditions are met. First, one must believe that a particular positive outcome will result from a particular change in behavior. Second, an individual must feel that a current behavior is negative enough to warrant change, and that a potential outcome of changed behavior is of positive value. Third, "the individual must perceive themselves as being capable of changing their behaviors" (Barton, 1990, p. 44). Lastly, one must actually intend to change. That is, intentions are the antecedent to actual behavior. A deficiency in any one of these areas can prevent wellness behaviors from occurring. The occurrence of wellness readiness may be influenced by degree of social support.

### **Social Support**

Social support theory, a variation of systems theory, involves one key principle. That is, social support systems are sets of interrelated units or persons sharing a common function or united to achieve a common purpose (Denton, 1989). People generally receive their social stimulation and motivation from a multidimensional support system that includes immediate family, extended family, friends, teachers, colleagues, organizations, and health professionals.

According to Hayes, Brightwell, & Antozzi, "[a] good support system involves caring" (1984, p. 46). People are

naturally drawn toward caring relationships, empowered communities, economic security, and liberating education. Support theory prescribes the development and maintenance of social networks to satisfy multiple needs. We care for ourselves and others when we provide multiple opportunities for growth and development. Hayes, et al. (1984) identified active listening, self-disclosure, and feedback as elements of relationships that are caring, mutual, and rewarding. These personality characteristics also foster the growth and development of new socially supportive relationships. Hayes, et al. (1984) recommended that students be intentional about lessening personal stress by expanding and improving their social support system. Stress is compounded by changes in students' social networks (Bogat, Caldwell, Rogosch, & Kriegler, 1985).

Although a number of developmental theories are available, no single theory is always adequate for use with adult students. Wellness theoretically combines health, holism, readiness, and social support, "thus creating an eclectic theory that more adequately meets the needs of professionals in their work to develop the whole person" (Warner, 1985, p. 33).

## **Researching Wellness**

In 1980 Spencer wrote that in order for adults to learn effectively, it is essential that they maintain their well-being. Both qualitative and quantitative measures of wellness can be found in the literature, and both research approaches tend to focus on the wellness activities of employees and students.

### **Qualitative Studies**

Subjective well-being has been thought of as a global, multidimensional construct encompassing life satisfaction, happiness, and morale (Okun, Stock, & Covey, 1982). Light (1993) conducted a formative evaluation of instructors' and students' experiences of a required course on wellness. Formally enrolled undergraduates and associated faculty were interviewed, observed, and their records reviewed. Outcomes for faculty included personal satisfaction, professional growth, creativity, and understanding of liberal education tenants. Outcomes for students included friendships, critical thinking, self-awareness, goal-setting, physical exercise, stress management, and communication.

McPortland (1988) examined the contributions of adult education principles to five worksite wellness programs. Data collected from interviews, observations, and surveys were themitized. Prominent themes included concern for the following

areas of program development: learner characteristics, program philosophy and goals, program evaluation and linkages, organization and administration, and instruction and curriculum. Mellor (1993) studied how adults advance in their journey toward greater wellness. A series of interviews with five middle-age males and five middle-age females were tape-recorded and transcribed. Transcriptions were then ethnographically coded via computer. Computer analyses linked goal achievement to visionary thinking, change to self-concept and life satisfaction, and adult learning to wellness.

Eyring (1993) attempted to better understand the subjective essence of wellness among 12 traditional college students. Phenomenological analysis of participants' taped interviews identified students' experiences of well-being as emerging from a context of change, and characterized by self-control and self-confidence. Clark (1986) qualitatively identified barriers that prevented 55 nursing students from participating in wellness behaviors. Barriers included fear, guilt, and lack of motivation. Wellness behaviors were reinforced by social support networks and self-responsibility.

It is not uncommon for educational programmers to propose that they can enhance employees' and/or students' well-being. Although this claim is easily made, it is difficult to substantiate subjectively. Qualitative research methodologies

seek to understanding the essence of persons' attitudes, needs, interests, beliefs, goals, and experiences (Terenzini, 1974). Operational evaluations of wellness may be inappropriate in that they may be, according to Okun, et al. (1982), insufficiently responsive to persons' attitudes, needs, interests, beliefs, goals, and experiences. Since "many educational programs contain objectives pertaining to subjective well-being, evaluations will have to include assessments of this domain" (Okun, et al., 1982, p. 534). Additional qualitative assessments of wellness have been conducted among high school students (Hisiro, 2000; Swinth, 1997), nurses (Cullen, 2000; Bone, 1997; Horton, 1998), master therapists (Mullenbach, 2000), nontraditional students (Brazier, 1998), law enforcement officers (Patton, 1998), cancer patients (Murdock, 2000; Young, 1998), diabetics (Klepac, 2000), African-American boys (Laidlaw, 1998), older widows (Collins, 1999), and human resource directors (Porterfield, 1999).

### **Quantitative Measures**

Quantitative research on wellness, like qualitative studies of wellness, tends to focus on the experiences of employees and students. Thus the majority of quantitative assessments of wellness can be categorized according to efforts made by employees and students.

Of the 2,000 employees exposed to Johnson & Johnson Company's comprehensive wellness program over a two-year period, Wilbur (1983) found that vigorous physical activity increased by 104% and that physical activity was associated with reduction in coronary risk. After five years, the medical costs of participants were 200% lower than the medical costs of a nonparticipating control group, and both hospital admissions and number of hospital stays for the control group were more than double those of participants (Bly, Jones, & Richardson, 1986). It was concluded in 1990 by the Association for the Advancement of Health Education that Johnson & Johnson Company's medical costs and absenteeism were reduced by 40% and 18%, respectively.

The University of Texas at Arlington sought to demonstrate concern for employee welfare by initiating an experimental wellness program that included components of both physical fitness and health education (Moxley, 1990). An experimental group of 50 student affairs employees was compared to a control group of 152 university employees. After ten months, the participating experimental group was significantly more satisfied than the nonparticipating control group in the areas of physical well-being, overall job, stress level, productivity, morale, and employee interaction.

At a small university in central Illinois, a survey was conducted to determine the wellness interests of 338 employees

and 533 students (Williams, 1990). Both groups rank ordered managing stress, exercising, and proper nutrition as their three highest priorities for wellness programming.

Wellness was one of 16 human development outcomes for two-year college students identified as important and encouraged by 572 randomly selected chief academic and student affairs officers (May, 1993). All states, accreditation regions, and types of two-year colleges were represented in the Delphi process. Physical fitness, nutrition, drug usage, sexuality, relationships, stress, and safety were the dimensions of wellness in need of improvement among college students reported by Heck and Pinch (1990).

Archer, Probert, and Gage (1987) conducted a comprehensive investigation into students' perceptions and practices of wellness. A nationwide survey of over 3,000 randomly sampled college students found that the physical dimension affected students' overall level of wellness the most and that the spiritual dimension affected students' wellness the least. Students felt they needed the most information about occupational wellness. Positive relationships and exercising were perceived to be the most beneficial dimensions of wellness. Detriments to wellness included worry, not enough sleep, procrastination, and depression. Participation in wellness activities was most influenced by the enjoyment experienced

during the activity and the time required to complete the activity.

According to Newhall, "[n]ursing science has begun to produce its own plethora of conceptual ideas concerning wellness" (1991, p. 5). Newhall found a significantly positive correlation between wellness behaviors and perceptions of empowerment among baccalaureate nursing students. Among 120 community college students, Owens (1989) found that enrollment in a two-year nursing program increased health behavior awareness but was not an impetus for behavioral change. Advanced nursing students demonstrated more preventive health care practices than beginning nursing students (Camooso, Green, Hoffman, Leuner, Mattis, Ptaszynski, Reiley, Silver, Winfrey, & Winland, 1980). Richter, Malkiewicz, and Shaw (1987) witnessed a decline in wellness behaviors among three groups of nursing students regardless of exposure to health promotion information. It was believed that stress was an intervening variable.

Residence hall departments are emphasizing living environments conducive to wellness lifestyles. Four hundred sixteen freshmen at a mid-sized midwestern state university were questioned concerning their experience as a resident living in one of six wellness oriented dormitories (Nicklaus, 1991). Significant differences existed between women and men. Women indicated that too much emphasis was placed on traditional



social activities. Women also indicated that their wellness residence hall environments did not provide enough intellectual stimulation. It was found that a wellness program operating in a residence hall at the University of Northern Colorado had a positive effect on the self-concepts and self-esteem of 23 randomly selected residents (Isaacson, 1991). Lack of such a program was associated with lower self-concept and self-esteem.

Boog (1990) sought to determine how 971 randomly selected students regarded wellness at Oklahoma State University. Graduate students ate more nutritiously, practiced safety, and dealt with stress better than undergraduates. Males used tobacco products more frequently than females. Caucasians drank more alcohol than African Americans. Overall, students ranked fitness and exercise, stress management, and weight control as wellness program essentials. Rapp (1988) investigated the relationship between stress and illness. Her study of 111 conveniently sampled participants included 82 graduate students. Rapp's total sample included 79 Caucasians and 23 African Americans. Illness was associated with greater stress among caucasians. Among blacks, illness was associated with less stress. Overall, greater stress was associated with illness. Rapp concluded that the variations in her findings resulted from participants' differing wellness levels.

## **National Wellness Institute**

Wellness centers and associated facilities are becoming more plentiful on U.S. college and university campuses. The prototype for many campus wellness programs is at the University of Wisconsin at Stevens Point. The University of Wisconsin at Stevens Point is also home to the National Wellness Institute. Founded in 1977, the National Wellness Institute has estimated that about one-third of the nation's 3,400 academic institutions provide wellness programming and facilities for approximately 13.3 million employees and students (McMillen, 1986).

Donald B. Ardell is a member of the National Wellness Institute's board of trustees. William H. Hettler is the director of health services at the University of Wisconsin-Stevens Point and president of the National Wellness Institute's board of directors. Both Ardell and Hettler are pioneers of the wellness movement and their definitions of wellness are presented earlier in this paper. The theory and research of Hettler (1980) has inspired the development of at least two instruments that measure wellness, e.g., TestWell, a Wellness Inventory (National Wellness Institute, 1992), and Lifestyle Assessment Questionnaire (National Wellness Institute, 1978).

Jones and Frazier (1994) tested the hypothesis that wellness professionals possess high levels of wellness as measured by TestWell and self-esteem as measured by the Self-

esteem Inventory (Coopersmith, 1990). Ninety wellness professionals attending the National Wellness Conference volunteered to participate. Total self-esteem scores correlated with total wellness scores ( $r = .59$ ;  $p < .05$ ). TestWell subscale means were highest on "safety" and "sexuality and emotional awareness." The lowest subscale scores were on "environmental wellness," "physical fitness and nutrition," and "emotional management." In addition, Jones and Frazier calculated a Cronbach coefficient alpha of .84 for TestWell. Additional investigations into the reliability and validity of TestWell have been conducted by Stewart (1998), McClanahan (1990), Van Dyke (2001), Murray (1996), and Owen (1996, 1999).

Physical fitness as measured by levels of drinking and smoking was negatively correlated with wellness as measured by the Lifestyle Assessment Questionnaire among 10,023 male and 10,698 female college students (Jensen, Peterson & Murphy, 1992). DeStefano and Richardson (1992) found a positive relationship between LAQ scores and self-reported, or subjective perceptions of physical fitness among 214 college freshmen. However, DeStefano and Richardson found no significant relationships between scores on the Lifestyle Assessment Questionnaire and objective physiological indices (i.e., blood pressure, pulse, cholesterol level, body composition, and flexibility). A sample of Royal Canadian Mounted Police (RCMP)

perceived themselves as in better health and eating more nutritiously than their Lifestyle Assessment Questionnaire scores indicated (Pealo, 1992). A positive relationship was found among RCMP between wellness as measured by the Lifestyle Assessment Questionnaire and physical fitness and nutrition.

Wellness as measured by the Lifestyle Assessment Questionnaire has been positively correlated with additional variables. Additional variables include age (Britzman, 1988; Edwards, 1994), level of education (Britzman, 1988), personality (Britzman, 1988), gender (Jenson, Peterson, & Murphy, 1992; Edwards, 1994; Freeman & Gintner, 1989; Cooper, 1990), learning environment (Agle, 1990), job satisfaction (Eickholt, 1995), use of tobacco and alcohol (Edwards, 1994), lifestyle (Honderd, 1986), self-concept (Honderd, 1986), mental health (Freeman & Gintner, 1989), behavior (Cooper, 1990), cognition (Cooper, 1990), and hostility (Leiker & Hailey, 1988).

Fedorovich (1992) hypothesized that students hired as resident assistants at Mississippi State University would have higher scores on the LAQ than students who applied but were not hired as resident assistants. Lifestyle Assessment Questionnaire scores were shown to be a differential factor in the selection of resident assistants at Mississippi State University. Lundquist (1989) hypothesized that student assistants in the dormitories at Colorado State University

learned their health behaviors from immediate family members. However, it was concluded that the family health behaviors of smoking, alcohol use, and obesity were not related to the overall wellness of 112 student assistants as measured by the Lifestyle Assessment Questionnaire at the .05 alpha level. Lundquist further concluded that student assistants who overcame ill-fated family influences did so as a result of accepting personal responsibility.

Both qualitative and quantitative measures of wellness can be found in the literature, and both research approaches tend to focus on the wellness activities of employees and students. Data collected from interviews and observations found employees to be concerned with professional growth, creativity, and program development. Students were interested in physical fitness, stress management, and relationships. Quantitatively, employees successfully modified their wellness behaviors by utilizing elements of physical fitness and health education. Productivity, diet, stress level, morale, medical costs, and absenteeism have been affected by employees' wellness levels. Drug usage, safety, occupational awareness, time management, social awareness, and sexuality are associated with wellness among students. Additional variables have been positively correlated with scores on the Lifestyle Assessment Questionnaire.

### **Summary**

This paper reviewed the literature related to wellness. Wellness was defined according to Dunn, Ardell, Hettler, Dossey and Keegan, Travis and Ryan, and Pilch. Theoretical perspectives included health and wellness, holism, wellness readiness, and social support. Research related to wellness was discussed in terms of qualitative studies and quantitative measures.

## References

Agley, D. E. (1990). The effects of learning environments on wellness and health risk scores (Doctoral dissertation, University of Maryland, 1989). Dissertation Abstracts International, 51, 420A.

Anspaugh, D. J., Hamrick, M. H., & Rosato, F. D. (1994). Wellness: Concepts and applications (2nd ed.). St. Louis, MO, Mosby.

Archer, J., Probert, B., & Gage, G. (1987). College students' attitudes toward wellness. Journal of College Student Personnel, 28, 311-317.

Ardell, D. B. (1977). High level wellness: An alternative to doctors, drugs, and disease (2nd ed.). Berkeley, CA: Ten Speed Press.

Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.

Barton, D. M. (1990). Development of an instrument measuring wellness readiness in college undergraduates (Doctoral dissertation, University of Virginia, 1990). Dissertation Abstracts International, 51, 2988A.

Bhasker, R. (1989). Reclaiming reality: A critical introduction to contemporary philosophy. London, England: Verso.

Bly, L., Jones, R. C., & Richardson, J. E. (1986). Impact of worksite health promotion on health care costs and utilization: Evaluation of Johnson & Johnson's live for life program. Journal of the American Medical Association, 256, 3235-3240.

Bogat, G. A., Caldwell, R. A., Rogosch, F. A., & Kriegler, J. A. (1985). Differing specialists and generalists within college students' social support networks. Journal of Youth and Adolescence, 14, 1, 23-35.

Bone, D. (1997). Feeling squeezed: Dilemmas of emotion work in nursing under managed care (Doctoral dissertation, University of California, San Francisco, 1997). Dissertation Abstracts International, 58, 3322A.

Boog, J. T. (1990). Assessment of needs and attitudes concerning the student wellness program at Oklahoma State University (Doctoral dissertation, Oklahoma State University, 1989). Dissertation Abstracts International, 51, 668B.

Brazier, A. A. (1998). Nontraditional students in nontraditional graduate programs in education: Coping with the conflicts between family and career responsibilities and the institutional demands of higher education (Doctoral dissertation, Oregon State University, 1998). Dissertation Abstracts International, 59, 0393A.

Britzman, M. J. (1988). A theoretical view of wellness as it relates to personality priorities (Doctoral dissertation, University of South Dakota, 87). Dissertation Abstracts International, 48, 3051A.

Byer, C. O., & Shainberg, L. W. (1995). Living well: Health in your hands (2nd ed.). New York, NY: HarperCollins.

Camooso, C., Greene, M., Hoffman, J., Leuner, J., Mattis, C., Ptaszynski, E., Reiley, P., Silver, S., Winfrey, M., & Winland, J. (1980). Preventive health practices of generic baccalaureate nursing students. Nursing Research, 29, 256-257.

Carlyon, W. (1984). Disease prevention/health promotion--bridging the gap to wellness. Health Values: Achieving High Level Wellness, 8, 3, 27-30.

Clark, C. C. (1986). Wellness nursing: Concepts, theory, research, and practice. New York, NY: Springer.

Collins, C. R. (1999). The older widow-child relationship as an influence upon health promoting behaviors (Doctoral dissertation, Catholic University of America, 1999). Dissertation Abstracts International, 60, 1527B.

Cooper, S. E. (1990). Investigation of the lifestyle assessment questionnaire. Measurement and Evaluation in Counseling and Development, 23, 2, 83-87.

Coopersmith, S. (1990). Self-esteem Inventory (8th ed.). Palo Alto, CA: Consulting Psychological Press.

Cullen, P. D. (2000). Determining the continuing education needs of nurses: A collaborative approach (Doctoral



dissertation, University of Delaware, 2000). Dissertation Abstracts International, 61, 0847A.

Denton, W. H. (1989). The next educational reform. Community Education Journal, 16, 2, 6-10.

DeStefano, T. J., & Richardson, P. (1992). The relationship of paper-and-pencil wellness measures to objective physiological indexes. Journal of Counseling and Development, 71, 2, 226-230.

Dossey, B. M., & Keegan, L. (1988). Holism and the circle of human potential. In Holistic nursing: A handbook for practice (pp. 3-21). Gaithersburg, MD: Aspen.

Dunn, H. L. (1961). High-level wellness. Arlington, VA: Beatty.

Eddy, J. M., Bibeau, D. L., Glover, E. D., Hunt, B. P., & Westerfield, R. C. (1989). Wellness perspectives part one: History, philosophy, and emerging trends. Wellness Perspectives: Research, Theory, and Practice, 6, 3-19.

Edlin, G., & Golanty, E. (1992). Health and wellness (4th ed.). Boston, MA: Jones and Bartlett.

Edwards, D. J. O. (1994). An analysis of the differences between wellness scores, demographic variables and the use of tobacco and alcohol (Doctoral dissertation, Kansas State University, 1993). Dissertation Abstracts International, 54, 3645A.

Eickholt, J. W. (1995). The relationship of wellness and job satisfaction for elementary school principles in the state of Wisconsin (Doctoral dissertation, Marquette University, 1994). Dissertation Abstracts International, 55, 2224A.

Eyring, M. O. (1993). More than feeling good: Investigating college students' experience of well-being (Doctoral dissertation, University of Tennessee, 1992). Dissertation Abstracts International, 53, 3847A.

Fedorovich, S. E. (1992). Wellness as a differential factor in the selection of resident assistants in university student housing (Doctoral dissertation, Mississippi State University, 1991). Dissertation Abstracts International, 53, 68A.

Freeman, S. T., & Gintner, G. G. (1989). Validation of the lifestyle assessment questionnaire: Targeting students with mental health problems. College Student Journal, 23, 3, 272-279.

Greenberg, J. S. (1985). Health and wellness: A conceptual differentiation. Journal of School Health, 55, 403-406.

Hammrick, M., Frankle, R., & Crase, D. (1990). Fitness and wellness: A new dimension of general education in higher education. Wellness Perspectives: Research, Theory, and Practice, 6, 67-73.

Hayes, G. A., Brightwell, J., & Antozzi, R. K. (1984). Managing stress through leisure awareness. Parks and Recreation, 19, 43-47, 69.

Heck, M., & Pinch, W. (1990). Health needs and concerns of college men: A trend analysis. Health Values, 14, 9-14.

Heshusius, L. (1989). Holistic principles: Not enhancing the old but seeing a-new. Journal of Learning Disabilities, 22, 10, 595-602.

Hettler, W. H. (1980). Wellness promotion on a university campus. Family and Community Health: The Journal of Health Promotion and Maintenance, 3, 77-92.

Hisiro, T. A. (2000). The influences of performance athletes: Focus on high school cheerleading (Doctoral dissertation, University of Pittsburgh, 2000). Dissertation Abstracts International, 61, 4717A.

Honderd, R. J. (1986). The effect of a well-defined adult wellness program on lifestyle and self-concept (Doctoral dissertation, Michigan State University, 1985). Dissertation Abstracts International, 47, 1198A.

Horton, B. J. (1998). Nurse anesthesia as a subculture of nursing in the United States (Doctoral dissertation, Rush University, 1998). Dissertation Abstracts International, 59, 5786B.

Iano, R. P. (1990). Special education teachers: Technicians or educators? Journal of Learning Disabilities, 23, 8, 462-465.

Isaacson, M. L. (1991). The effects of a residence hall-based wellness program on self-concept and self-esteem of college men and women (Masters thesis, University of Northern Colorado, 1991). Masters Abstracts International, 29, 635.

Isaacson, S. L. (1993). Open systems as seen on the street and from the fourteenth floor. Journal of Learning Disabilities, 26, 5, 326-329.

Jensen, M. A., Peterson, T. L., & Murphy, R. J. (1992). Relationship of health behaviors to alcohol and cigarette use by college students. Journal of College Student Development, 33, 163-170.

Jones, P. L, & Frazier, S. E. (1994). Assessment of self-esteem and wellness in health promotion professionals. Psychological Reports, 75, 2, 833-834.

Klepac, M. P. (2000). Integrative diabetes education: Expansion and evaluation of a holistic program using quantitative and qualitative methodology (Doctoral dissertation, Pennsylvania State University, 2000). Dissertation Abstracts International, 61, 1313A.

Laidlaw, P. A. (1998). Absent father, African-American adolescent males from urban areas: A different path towards health (Doctoral dissertation, Massachusetts School of Professional Psychology, 1998). Dissertation Abstracts International, 60, 2348B.

Leiker, M., & Hailey, R. J. (1988). A link between hostility and disease: Poor health habits? Behavior Medicine, 14, 3, 129-133.

Light, K. M. (1993). Formative evaluation of a required college wellness course: A qualitative study (Doctoral dissertation, Texas A&M University, 1993). Dissertation Abstracts International, 54, 2062A.

Lundquist, P. A. (1989). The relationship of family behaviors to wellness levels of students at Colorado State University (Doctoral dissertation, Colorado State University, 1987). Dissertation Abstracts International, 49, 2942A.

Maslow, A. (1968). Toward a psychology of being. New York, NY: Van Nostrand.

May, D. K. (1993). Perceptions of appropriate human development outcomes for the community college student: A national study of the educational responsibility for student development (Doctoral dissertation, Ohio University, 1992). Dissertation Abstracts International, 54, 68A.

McClanahan, B. S. (1990). The influence of an undergraduate wellness course on lifestyle behaviors: A comparison of an Activity-based course and a cognitive-based course (Doctoral dissertation, Memphis State University, 1990). Dissertation Abstracts International, 52, 0433A.

McDowell, C. F. (1989). Wellness in the leisure-work relationship. Career Planning and Adult Development Journal, 5, 2, 17-23.

McMillen, L. (1986). Colleges finding 'wellness' programs cut absenteeism, boost productivity and morale of their staff members. Chronicle of Higher Education, 31, 20-22.

McPortland, P. A. (1988). Health education for fitness in the workplace: An adult education perspective (Doctoral dissertation, Columbia University Teachers College, 1988). Dissertation Abstracts International, 49, 1346A.

Mellor, B. J. (1993). Journey to wellness: A transitional experience (Doctoral dissertation, University of Toronto, 1991). Dissertation Abstracts International, 53, 2698A.

Mullenbach, M. A. (2000). Master therapists: A study of professional resiliency and emotional wellness (Doctoral dissertation, University of Minnesota, 2000). Dissertation Abstracts International, 61, 3286B.

Murdock, J. M. (2000). Confronting death: The perceptions and experiences of African-American and white head and neck cancer patients at the University of Cincinnati Medical Center (Doctoral dissertation, The Union Institute, 2000). Dissertation Abstracts International, 62, 1792B.

Murray, S. R. (1996). The efficacy of an introductory health/wellness course in positively changing wellness behaviors (Doctoral dissertation, Middle Tennessee State University, 1999). Dissertation Abstracts International, 57, 1509A.

Moxley, L. S. (1990). The development and impact of an experimental student affairs employee wellness program. Research in Higher Education, 31, 3, 211-233.

National Wellness Institute. (1978). Lifestyle Assessment Questionnaire. Stevens Point, WI: National Wellness Institute.

National Wellness Institute. (1992). TestWell, A Wellness Inventory. Stevens Point, WI: National Wellness Institute.

Newhall, L. M. H. (1991). An investigation into the relationship between patterns of empowerment and personal perception of wellness in baccalaureate nursing students (Masters thesis, University of Nevada, Reno, 1990). Masters Abstracts International, 29, 96.

Nicklaus, H. E. (1991). Relationship of a wellness residence hall environment and student sense of competence and academic achievement (Doctoral dissertation, Ball State University, 1991). Dissertation Abstracts International, 52, 819A.

Okun, M. A., Stock, W. A., & Covey R. E. (1982). Assessing the effects of older adult education on subjective well-being. Educational Gerontology, 8, 523-536.

Owen, T. R. (1996). The relationship between wellness and self-directed learning among graduate students (Doctoral dissertation, University of Tennessee, 1996). Dissertation Abstracts International, 57, 4288A.

Owen, T. R. (1999). The reliability and validity of a wellness inventory. American Journal of Health Promotion, 13, 3, 180-182.

Owens, B. W. (1989). Health behaviors of nursing students (Doctoral dissertation, Temple University, 1989). Dissertation Abstracts International, 50, 2341B.

Patton, G. L. (1998). A qualitative study of spirituality with veteran law enforcement officers (Doctoral dissertation, Ohio University, 1998). Dissertation Abstracts International, 59, 2365A.

Pealo, W. G. (1992). The effectiveness of two stages of wellness intervention upon RCMP officers in the victoria

subdivision (Doctoral dissertation, University of Alberta, 1991). Dissertation Abstracts International, 53, 782B.

Pender, N. J. (1987). Health promotion in nursing practice (2nd ed.). Norwalk, CT: Appleton-Century-Crofts.

Petosa, R. (1984). Wellness: An emerging opportunity for health education. Health Education, 15, 37-39.

Pilch, J. J. (1989). Wellness spirituality. New York, NY: Crossroad.

Poplin, M. S. (1988). Holistic/constructivist principles of the teaching/learning process: Implications for the field of learning disabilities. Journal of Learning Disabilities, 21, 7, 401-416.

Porterfield, S. Y. C. (1999). United States fortune 500 companies human resource directors' perceptions regarding competencies required in the 21<sup>st</sup> century of entry-level business employees with four-year business degrees (Doctoral dissertation, Mississippi State University, 1999). Dissertation Abstracts International, 61, 0263A.

Rapp, S. (1988). Differential coping resources and resultant illnesses in blacks and whites (Doctoral dissertation, Georgia State University, 1988). Dissertation Abstracts International, 49, 2385B.

Richter, J. M., Malkiewicz, J. A., & Shaw, D. (1987). Health promotion behaviors in nursing students. Journal of Nursing Education, 26, 367-371.

Rogers, C. R. (1961). On becoming a person. Boston, MA: Houghton Mifflin.

Spencer, B. (1980). Overcoming the age bias of continuing education. In G. G. Darkenwald, & G. A. Larson (Eds.), Reaching hard to reach adults (pp. 71-86). New Directions for Continuing Education, No. 8. San Francisco, CA: Jossey-Bass.

Stewart, J. L. (1998). Reliability and validity of the TestWell: Wellness Inventory-High School Edition (Doctoral dissertation, Middle Tennessee State University, 1998). Dissertation Abstracts International, 59, 2421A.

Swinth, Y. L. (1997). The meaning of assisted technology in the lives of high school students and their families (Doctoral dissertation, University of Washington, 1997). Dissertation Abstracts International, 58, 2995B.

Terenzini, P. T. (1974). Research and the territorial imperative. NASPA Journal, 12, 9-15.

Travis, J., & Ryan, R. (1988). The wellness workbook (2nd ed.). Berkeley, CA: Ten Speed Press.

U.S. Department of Health and Human Services (1990). Healthy people 2000: National health promotion and disease prevention objectives. Washington, DC: U.S. Department of Health and Human Services.

Van Dyke, M. E. (2001). The relationship between college students' ethnicity and wellness scores (Doctoral dissertation, University of Miami, 2001). Dissertation Abstracts International, 62, 0941A.

Warner, M. J. (1985). Wellness: A developmental programming model for residence halls. The Journal of College and University Student Housing, 15, 1, 31-34.

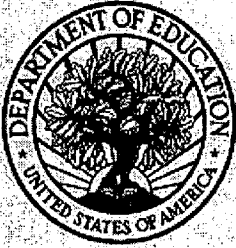
Warner, M. M. (1993). Objectivity and emancipation in learning disabilities: Holism, from the perspective of critical realism. Journal of Learning Disabilities, 26, 5, 311-325.

Wilbur, C. S. (1983). The Johnson & Johnson program. Preventive Medicine, 12, 672-681.

Williams, M. A. (1990). Health habits, perceived health status, and health interests of students and employees of a select university (Doctoral dissertation, Southern Illinois University at Carbondale, 1988). Dissertation Abstracts International, 50, 1956A.

World Health Organization (1947). Constitution of the World Health Organization. Chronicle of the World Health Organization, 1, 29-43.

Young, R. P. (1998). The experiences of cancer patients practicing mindfulness meditation (Doctoral dissertation, Saybrook Institute, 1998). Dissertation Abstracts International, 60, 1508B.



U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: Student and Employee Wellness in Higher Education: A Literature Review	
Author(s): T. Ross Owen, Ed.D.	
Corporate Source: Morehead State University	Publication Date: February 1, 2002

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education (RIE)*, are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

<p>The sample sticker shown below will be affixed to all Level 1 documents</p> <div style="border: 1px solid black; padding: 5px;"> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY</p> <p style="text-align: center;">_____ Sample</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> </div> <p style="text-align: center;">1</p> <p style="text-align: center;">Level 1</p> <p style="text-align: center;"><input checked="" type="checkbox"/></p>	<p>The sample sticker shown below will be affixed to all Level 2A documents</p> <div style="border: 1px solid black; padding: 5px;"> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY</p> <p style="text-align: center;">_____ Sample</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> </div> <p style="text-align: center;">2A</p> <p style="text-align: center;">Level 2A</p> <p style="text-align: center;"><input type="checkbox"/></p>	<p>The sample sticker shown below will be affixed to all Level 2B documents</p> <div style="border: 1px solid black; padding: 5px;"> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY</p> <p style="text-align: center;">_____ Sample</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> </div> <p style="text-align: center;">2B</p> <p style="text-align: center;">Level 2B</p> <p style="text-align: center;"><input type="checkbox"/></p>
--	---	---

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please →

Signature:	Printed Name/Position/Title: T. Ross Owen, Ed.D. Assistant Professor		
Organization/Address: Morehead State University MSU=UPO 677 Morehead, KY 40351	Telephone: 606-783-2154	FAX: 606-783-5032	Date: 3-4-02
E-Mail Address: r.owen@moreheadstate.edu			



(over)