

Online Journal of Health Ethics

Volume 2 | Issue 1

Article 6

Fostering Self Efficacy as an Ethical Mandate in Health Promotion Practice and Research

Constance S. Hendricks

Hampton University School of Nursing, constance.hendricks@hamptonu.edu

Denisha L. Hendricks

Livingstone College

Shelia J. Webb

Center for Empowered Decision Making

Janice Bonner Davis

Southern University School of Nursing, Master of Science in Nursing Student

Barbara Spencer-Morgan

Christus St. Patrick Hospital

Follow this and additional works at: <http://aquila.usm.edu/ojhe>

Recommended Citation

Hendricks, C. S., Hendricks, D. L., Webb, S. J., Davis, J. B., & Spencer-Morgan, B. (2005). Fostering Self Efficacy as an Ethical Mandate in Health Promotion Practice and Research. *Online Journal of Health Ethics*, 2(1). <http://dx.doi.org/10.18785/ojhe.0201.06>

This Article is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Online Journal of Health Ethics by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.

Fostering Self Efficacy as an Ethical Mandate in Health Promotion Practice and Research

Constance S. Hendricks, PhD, RN

Hampton University School of Nursing, Dean
Hampton, VA

Denisha L. Hendricks

Livingstone College, Dean of the Academic Village
Salisbury, NC

Shelia J. Webb

Center for Empowered Decision Making, Dean
New Orleans, LA

Janice Bonner Davis

Southern University School of Nursing, Master of Science in Nursing Student
Baton Rouge, LA

Barbara Spencer-Morgan

Medical Surgical Unit 31, Christus St. Patrick Hospital, Director
Lake Charles, LA

Abstract

Self-efficacy, a social psychology concept, is defined as the likelihood of an individual engaging in health behaviors. Correctly understood, authors posit that health care providers and researchers have an ethical mandate to foster self-efficacy in patients. Further, self-efficacy promotes the commonly ascribed moral principles of respect for the person as a being of worth and fosters autonomy.

This paper provides an overview of the concept of self-efficacy, provides a brief discussion on the difference between self-esteem and self-efficacy, and discusses its relationship to health promotion and selected moral principles. Health care providers and researchers are challenged to foster self-efficacy among patients and others as a means to facilitate health promotion.

The continuous ethical challenge for health care providers, health promotion advocates and researchers is to remain mindful of the complexity of the opportunity to empower others, the privilege to improve the quality of life for others and the responsibility to remain true to the ethical principles at all times. Consideration of self-efficacy as an ethical mandate remains a vital element within health promotion practice and research.

Keywords:

Self-efficacy, Bandura, Health Promotion, Moral Principles, Empowerment

Fostering Self Efficacy as an Ethical Mandate in Health Promotion Practice and Research

Introduction

Almost daily, one hears discussion about someone having low self-esteem. If investigated closely, there is a high probability that what the person lacked was not self-esteem but self-efficacy. All too often, the term self-esteem is used when self-efficacy is implied. Authors posit that self-efficacy is a higher level of self-perception or awareness. It is one's self-efficacy that empowers the self to attempt the perceived achievable. It is one's self-efficacy that promotes the person to persevere toward a goal that has long range/ futuristic benefits over immediate gratification.

Self-esteem is defined as an attitude of acceptance, approval, and respect toward oneself, manifested by personal recognition of one's abilities and achievements and an acknowledgement and acceptance of one's limitations. (Webster, 1999). Coopersmith (1981) defined self-esteem as the person's evaluation about self that expresses an attitude of approval or disapproval and indicates the extent to which the individual believes they are capable, significant, successful, and worthy. Moreover, Anderson, et al. (1999) considers self-esteem to be a subjective appraisal of self based on prior learning and experiences that reflect how the individual perceives him or herself to be worthy or capable. Self-esteem has been found to have a direct effect on health promoting behaviors (Hendricks, et al, 2001; Anderson and Oinhausen, 1999; Hendricks, 1998; Sahagun, 1990 as cited in Reasoner, 1999). Smith-Hendricks (1992) found that early adolescents who perceive themselves to have high self-esteem have strong beliefs in their own activities to successfully perform behaviors.

In contrast, self-efficacy as defined by Bandura (1986) is one's judgment of one's capabilities to organize and execute courses of action required to attain designated types of performances (p. 391). It is not a judgment concerning the skills one possesses, but rather the beliefs or perceptions about what one can do with these skills. People are more likely to attempt activities and situations that they feel manageable while avoiding those activities and situations they feel exceed their capabilities.

Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes (<http://www.emory.edu/EDUCATION/mfp/BanEncy.html>).

According to Bandura (1981), self-efficacy develops from four sources of information: performance accomplishments, vicarious experience, verbal persuasion and emotional arousal.

- 1) Performance accomplishments or inactive attainments are especially influential because they are based upon personal experiences of mastery (Bandura, Adams, & Beyer, 1977). Successes raise efficacy appraisals, while repeated failures lower them, especially if the failures occur early in the course of events and do not reflect lack of effort or adverse circumstances. If a strong sense of efficacy is developed after repeated failures, occasional failures are unlikely to have much effect on judgments of ones capabilities (Bandura, 1986, p. 399).
- 2) Vicarious experiences also can influence self-efficacy, but to a lesser extent (Lewellyn, 1989). Observing others engage successfully in certain behaviors can increase the observers' expectations that they will also be able to perform that behavior. Perceived similarity to the model is important in enhancing the effectiveness of the type of information (Bandura, 1986, p. 400).
- 3) Verbal persuasion is a third source of efficacy information. Individuals may be led, through suggestion, into believing that they possess certain capabilities and that they can surmount their difficulties. While social persuasion alone may be limited, it can contribute to successful performance if the heightened appraisal is realistic. Exceptions induced in this way are likely to be weaker without a corresponding experiential basis for them (Bandura, 1986, p. 400).
- 4) Emotional arousal is the last source of efficacy information (Bandura, 1977). Individuals rely partly on their state of emotional arousal in judging their capabilities and vulnerability to stress. They are more likely to expect success in a situation in which they do not experience aversive arousal since a high level of arousal is usually detrimental to performance (Bandura, 1986, p. 406).

Bandura (1977) recognized the need to develop feelings of self-efficacy in order to produce and regulate life events. This work suggested that expectations of self-efficacy are the most powerful determinants of behavioral change because they determine ones initial decision to perform a behavior, the effort expended, and the persistence of approach whenever faced with adversity. Measures of self-efficacy have been found to be good predictors of a variety of behaviors, (Bandura, Adams, Hardy, & Howells, 1980).

As early as 1977, Bandura stressed the need for clinicians, educators, coaches and administrators to recognize the powerful impact of efficacy expectations on behavioral change in order to understand the potential of therapeutic approaches on behavioral changes. Study results supported the theoretical populations of Bandura (Sherer, Maddux, Merchandante, Prentice-Dunn, Jacobs & Rogers, 1982). Such results further supported the hypothesis that belief in one's ability to perform is of many factors that contribute to an individual's attitude toward one's self (p. 670).

Prior performance is the strongest predictor of self-efficacy beliefs (Bandura, 1982): however self-efficacy and personal goals also can be influenced by information communicated by others, by information conveyed vicariously by the performance of models, and by ones perceived controllability over constraints within the performance domain (Bandura, 1986; Bandura & Wood, 1989). The effects of self-efficacy on performance are both direct and mediated by personal goals (Early & Lituchy, 1991; Wood, Bandura, & Bailey, 1990).

A person's belief that they can motivate themselves and regulate their own behavior plays a crucial role in whether they even consider changing detrimental health habits or pursuing rehabilitative activities (Bandura, 1997). Even people who acknowledge that their habits are harming their health achieve little success in curtailing their behavior unless they judge themselves as having some efficacy to resist situational and emotional investigators (Stretcher, Becker, Kirscht, Eraker, & Graham-Tomasi, 1985).

Further, self-efficacy investigations led to the discovery that perceived self-efficacy influences all aspects of behavior, including the acquisition of new behaviors or inhibition of existing behaviors. Self-efficacy was thought to affect behavioral functioning by influencing people's choice activities, effort expenditure, and persistence in the face of difficulties (Schunk, 1981, p. 93). When challenged with obstacles, problems, or failures, individuals who experience serious doubts about their capabilities tend to decrease their efforts or give up, whereas those with a strong sense of efficacy exert greater effort to master the task (Bandura & Schunk, 1981; Bandura, 1986).

Care should be taken to differentiate between self-esteem and self-efficacy. They are not synonymous. Herr and Wagner (2003) provide a concise statement regarding the related but different concepts when they stated, self-esteem is considered a generalized self-assessment of ones worth that is not task specific while self-efficacy is context sensitive and task specific to a particular goal that is directly linked to a specific behavior outcome. With this differentiation as a guide, the authors explore the notion of fostering self-efficacy to promote health promotion lifestyle choices from an ethical perspective.

Self-efficacy and Moral Principles

Self-efficacy promotes the commonly ascribed moral principles of respect for the person as a being of worth and fosters autonomy. Subsumed within the notion of self-efficacy is self-determination, choice, non-maleficence, beneficence and justice (Beauchamp & Childress, 1994). Over centuries, philosophers have debated the correlates of the human will and its relationship to choice, decisions, action, moral responsibility and self-determination (Augustine & Williams, 1993). Non-maleficence as related to the Hippocratic oath reminds that one must first do no harm." As one endeavors to foster self-efficacy, the challenge it to ensure that the principle of non-maleficence is upheld (<http://www.tpta.org/Ethics03/nonmaleficence.htm>). Although beneficence is often considered the first principle of morality, it is also considered the middle principle of

ethical actions. The act of beneficence is partially dependent for its content on how one defines the concepts of the good and goodness. As a middle principle, beneficence is not a specific moral rule and cannot by itself tell us what concrete actions constitute doing good and avoiding evil (http://www.ascensionhealth.org/ethics/public/key_principles/beneficence.asp). The notion of justice must be viewed from the broad perspective related to what one determines as actually being owed or due to another. Therefore, justice in action will vary according to certain philosophical and methodological presuppositions from which one approaches an issue. Justice is viewed as a multidimensional ethical concept with four aspects: commutative, contributive, legal, distributive (<http://www.ascensionhealth.org/ethics/public/issues/justice.asp>). The authors submit that health care providers and researchers have a moral obligation to consider one's self efficacy in health promotion practice and research. As such, respect for the person as a being of worth is fostered and autonomy is engendered.

Measurements of Self-Efficacy

Bandura (1977, 1982) outlined methods for measurement of self-efficacy expectations. These methods emphasized that the level of self-efficacy for a specific task is measured by asking the subject to judge whether or not they believed they were capable of performing a specific activity. The predictive power of self-efficacy theory as well as the relationship between self-efficacy expectations and behavior were studied by Bandura, Adams, and Beyer (1977) and Bandura, Reese and Adams (1982). The studies demonstrated that self-efficacy expectations are good predictors of performance and that the higher the level of self-efficacy, the greater the performance accomplishment of subsequent tasks.

Self-efficacy has been measured in many studies across various domains using a variety of instruments. Kelly, Morgan-Kidd, Champion and Wood (2003) observed 100 incarcerated adolescent girls in a Texas juvenile justice facility to assess self-efficacy in knowledge, attitudes and values and behavior. The Mathtech Sexuality Questionnaire was the instrument used to measure self-efficacy. Turner and Lapan (2002) measured self-efficacy in career planning and parental support in middle school students to assist them in understanding the relationship between learning and work, understanding how to gain the information necessary to seek and obtain various jobs and to understand the process of career planning. Turner and Lapan used the Mapping Vocation Challenges program, a computerized self-report program, to measure career self-efficacy. Dishman et al. (2004) measured self-efficacy and the development of behavioral skills using curricular activities within physical education classes and health education instructions using the Lifestyle Education for Activity Program (LEAP) in the school-based intervention that emphasized changes in instruction and school environment. Pender, Bar-Or, Wilk &, Mitchell (2002) used an exercise challenge test to measure self-efficacy with the exercise habits of adolescent girls.

Health Promotion and Self-Efficacy

Interest in health promotion is the result of many factors, some of which include the current focus on chronic diseases, the aging of the population and its influence, and the escalating cost of health care services (Webb, 2004). A major driving force, however, is an overwhelming body of research which links individual behaviors to increased risk of morbidity and mortality (Lewis & Rimer, 1996; Gaston & Porter, 2000; U.S. Department of Health and Human Services, 2000). For this reason, assisting individuals in understanding the impact of how behavior and lifestyle choices impact on health outcomes has become the pivotal theme of many health education and health promotion efforts.

Lawrence and McLeroy (1986) asserted that self-efficacy was a principle connection between knowledge and action since the belief that one can do a behavior usually occurs before one actually attempts the behavior. However, knowing what to do and believing one can do it were not the only determinants of behavior. One must also know how to do it and one should want to do it (incentive). This assertion has implications for health promotion programs in that many are presented via health education. The premise supporting health promotion education has been that information was the necessary component for behavioral change. However, studies have indicated that provision of relevant information does not guarantee appropriate choice (Sachs, 1987). Because self-efficacy is strongly linked to behavioral performance, it has been used to measure health intervention outcomes (Lawrence & McLeroy, 1986). Lawrence and McLeroy (1986) postulated that self-efficacy can help identify individuals at risk for certain unhealthy behaviors. In addition, this work provided a way to measure the extent to which specific skills learned to deal with a specific problem might be transferred to other behaviors, settings, and times.

Behavioral factors have been recognized as powerful attributes to human health throughout recorded history. In today's world, behavioral choices have been cited as the source of approximately one-half of all premature deaths in the United States (U.S. Department of Health and Human Services, 2000; McGinnis, 1993). The Centers for Disease Control suggests that 50% of the factors that determine our state of health are related to our behavior (Gaston & Porter, 2000).

Understanding the constructs and dynamics of human behavior is essential to designing strategies and programs which seek to change behavior and ultimately health outcomes. Over the past 20 years there has been a significant increase in public and professional interest in preventing premature deaths by promoting lifestyle changes, disease prevention and early detection through screening programs and health promotion efforts (Lewis & Rimer, 1996; McGinnis & Foege, 1993; Gaston & Porter, 2000; U.S. Department of Health and Human Services, 2000).

According to Healthy People 2010, (U.S. Department of Health and Human Services, 2000) minority populations in the United States experience a disproportionate amount of illness, injury, and mortality. A number of factors are considered when seeking explanations for this phenomenon. They include race, racism, social and economic conditions such as the lack of access to health care services and the lack of financial resources (Underwood, 1994).

Minority populations, specifically African-Americans, have been less responsive to traditional approaches to behavioral changes leading to improved health status. These traditional approaches include health education and health promotion efforts that are based on cognition, and which emphasize the rationality of the decision making process in health seeking behaviors (Rajaram & Rashidi, 1998). In the area of breast cancer, early detection, Rajaram & Rashidi (1998) further argue existing theoretical models of health behavior, such as the health belief model and the theory of reasoned action, are limiting and tend to view individual risk perceptions independent of their social and cultural context. These authors stress that cultural factors do make a difference apart from epidemiological effects (Rajaram & Rashidi, 1998).

Cultural factors are increasingly being recognized as possible barriers to health seeking behaviors among minority populations. Therefore, health promotion programs that take into consideration the cultural needs of the population for which the intervention is intended, have a better chance of influencing behavioral change. Motivating individuals to adopt healthy behaviors is much more complex than providing relevant information on a specific subject matter. Moreover, it requires careful consideration of the group for which the information is intended, its sociological, demographic and cultural makeup (Schneider, Salovey, Apanoritch, Pizarro, McCarthy, & Zullo, 2001). Additionally, contextual factors that may directly influence the way a person perceives and processes information must also be considered (Webb, 2004).

Self-efficacy as a social psychology concept has been utilized in nursing literature as a predictor for the likelihood of an individual engaging in health behaviors. Hendricks developed and tested a health promotion model, the Hendricks Perceptual Health Promotion Determinants (HPHD) Model with 1,036 early adolescents in rural Alabama (Hendricks, 1998). The model has been further tested with more than 3,000 early middle and late adolescents; each study continues to support the model propositions. Self-efficacy emerged as a major determinant of engagement in health promoting or health compromising behaviors. In the model development and replicated testing studies, self-efficacy was identified in the model as an influential determinant of an adolescent choosing to engage in health promoting behaviors. Hendricks (1997) posited that self-efficacy was a vital determinant because the ability to identify all options and their consequences enables and empowers one to make informed choices (p.29). Hendricks (2004) tested the model with a population that is not readily viewed as a vulnerable population, college athletes. Study results supported prior findings, self-

efficacy continued to be the essential factor in choosing to engage in health promoting behaviors.

While there is a convincing body of knowledge which documents health disparities and the disproportionate burden of chronic diseases and adverse health conditions, there is limited research on behavior change incorporating behavioral, cognitive and cultural constructs. Although most health promotion programs have been largely based within the context of a bio-medical model (Webb, 2004, Chavez, Hubbell, McMullin, Martinez, & Mishra, 1995), there remains an increasing interest in the recognition of the impact of sociocultural mediated beliefs on health seeking and health promoting behaviors (Hendricks, 2004; Hendricks et al, 2000, Rajaram & Rashidi, 1998; Lannin, Mathews, Mitchell, & Swanson, 2002). This is most important in view of the notion that culturally appropriate programs may increase the effectiveness of health promotion efforts in addressing health disparities (Webb, 2004; Lukwago, 2001).

Challenge to Foster Self-Efficacy

If we are to effectively address the second goal of Healthy People 2010, the elimination of health disparities and poor health outcomes for individuals, and sub-populations, it is incumbent on health practitioners to try different approaches to this long standing generational dilemma. Intervention strategies must take into consideration the unique racial and cultural characteristics of populations, as well as the social psychological principles such as self-efficacy. Efforts directed at changing behaviors must move beyond traditional medical models to effectively addressing the needs of populations and sub-groups who have historically been less responsive to conventional approaches (Webb, 2004).

Understanding the constructs and dynamics of human behavior such as self-efficacy is essential to designing strategies and programs which seek to change behavior and ultimately health outcomes. Over the past 20 years there has been a significant increase in public and professional interest in preventing premature deaths by promoting lifestyle changes, disease prevention and early detection through screening programs and health promotion efforts (Lewis & Rimer, 1996; McGinnis, 1993; Gaston & Porter, 2000; U.S. Department of Health and Human Services, 2000). These authors submit that among a vast majority of health care providers and researchers, consideration of ones self-efficacy has been overlooked as a serious construct in which to promote health.

If efforts to foster self-efficacy are to be successful, they must be perceived as relevant and valuable to the target participants. A very useful scenario used by this team cites the self-efficacy exhibited by Dorothy in the classic movie, *The Wizard of Oz* (Langley, Ryerson, & Woolf, 1939). Hendricks C. and Hendricks, D. regularly relate the self-efficacy concept to youth and adult groups by reminding them of a very popular recording by pop artist, R. Kelly, *I Believe I Can Fly*. The songs message is about self-

efficacy and if one can visualize it, one can achieve the desired goal. Yes! If, I can see it can do it! If I believe it. I can achieve it! (Kelly, 1996, track 4).

The desire to foster self-efficacy in others is a challenge that those desiring to promote health promotion empowerment must be willing to accept. Webb (2004) affirms that any successful behavior change requires self-efficacy on the part of the person who is desirous of the behavior change. The continuous ethical challenge for health care providers, health promotion advocates and researchers is to remain mindful of the complexity of the opportunity to empower others, the privilege to improve the quality of life for others and the responsibility to remain true to the ethical principles at all times. Consideration of self-efficacy as an ethical mandate remains a vital element within health promotion practice and research.

References

- Anderson, J. A. & Oinhausen, K. S. (1999). Adolescent self-esteem: A foundational disposition, *Nursing Science Quarterly*, 12 (1), 62-67.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive Therapy and Research*, 1, 287-310.
- Bandura, A., Adams, N., & Beyer, J. (1977). Cognitive process mediating behavioral change. *Cognitive Therapy and Research*, 1, 287-310.
- Bandura, A., Adams, N. E., Hardy, A. B., & Howell, G. N. (1980). Tests of the generality of self-efficacy theory. *Cognitive Therapy and Research*, 4, 39-66.
- Bandura, A., Reese, L., & Adams, N. E. (1982). Microanalysis of actions and fear arousal as a function of differential levels of perceived self-efficacy. *Journal of Personality and Social Psychology*, 43, 5-21.
- Bandura, A., & Schunk, D. (1981). Cultivating competent, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of Personality and Social Psychology*, 41, 586-598.
- Bandura, A. & Wood, R. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision making. *Journal of Personality and Social Psychology*, 56, 805-814.
- Beauchamp, T. L., & Childress, J. F. (1994). *Principles of biomedical ethics* (4th ed.). New York: Oxford University Press.
- Chavez, L. R., Hubbel, F. A., McMullin, J. M., Martinez, R. G., & Mishra, S. I. (1995). Understanding knowledge and attitudes about breast cancer. A cultural analysis. *Arch Family Medicine*, 4(2), 145-152.
- Early, P. C., & Lituchy, T. R. (1991). Delineating goal and efficacy effects: A test of three models. *Journal of Applied Psychology*, 74, 81-98.
- Gaston, M., & Porter, G. (2000). *The African American woman's complete guide to midlife health and wellness*. Washington, DC: Random House.

- Hendricks, C. S. (1998a). Perceptual determinants of early adolescent health promoting behaviors: Model development. *Journal of Theory Construction and Testing*, 2, 13-22.
- Hendricks, C. S. (1998b). The influence of race and gender on health promoting behavior determinants of southern at-risk adolescents. *The Association of Black Nurse Faculty Journal*, 9, 4-10.
- Hendricks, C. S., Murdaugh, C., Tavakoli, A., & Hendricks, D. (2000). Health promoting behaviors among rural southern early adolescents. *The Association of Black Nursing Faculty Journal*, 11(5), 123-128.
- Hendricks, C., Tavakoli, A., Hendricks, D., Harter, N., Campbell, K., L'Ecuyer, R., et al. (2001). Self-esteem matters: Racial and gender differences among rural southern adolescents. *Journal of National Black Nurses Association*, 12(2), 15-23.
- Hendricks, D. L. (2004). The relationship of hope and self-efficacy to health promoting behaviors among student-athletes attending historically black colleges and universities. Unpublished doctoral dissertation, Auburn University, Auburn, AL.
- Herr, T. and Wagner, S.L. (2003). Self-efficacy as a welfare-to-work goal: Emphasizing both psychology and economics in program design. *Research and Policy Update 2003*. Project Match, Chicago, IL.
- Kelly, R. (1996). I believe I can fly. On the Space Jam soundtrack, New York: Atlantic Records.
- Lawrence, L., & McElroy, K. R. (1986). Self-efficacy and health promotion. *Journal of School Health*, 56(8), 317-321.
- LeRoy, M. (Producer), Langley, N., Ryerson, F., Woolf, E., & Mahin, J. L. (Writers). (1939). *The wizard of oz*. [Motion picture]. California: MGM Pictures.
- Lewellyn, R. A. (1989). Gender difference in achievement, self-efficacy, anxiety, and attributions in mathematics among primarily black junior high school. (Doctoral dissertation, University of Akron). UMI Dissertation Services.
- Lewis, G. K., & Rimer, B. K. (1996). *Health behavior and health education: Theory, research, and practice*. San Francisco: Jossey-Bass.
- Lukwago, S. N. (2001). Measurement and Health-Related Correlates of Collectivism, Spirituality, Racial Pride and Time Orientation in Urban Black Women. (2001). (Doctoral Dissertation, Saint Louis University, 2001). *Dissertation Abstracts International*.
- McGinnis, J., & Foege, W. (1993). Actual causes of death in the United States. *JAMA*, 270(18), 2207-2212.

- Pender, N. J., Bar-Or, O., Wilk, B., & Mitchell, S. (2002). Self-efficacy and perceived exertion of girls during exercise. *Nursing Research*, 51(2), 86-91.
- Rajaram, S., & Rashidi, A. (1998). Minority women and breast cancer screening: The role of cultural explanatory models. *Preventive Medicine*, 27, 757-764.
- Schneider, T. R., Salovey, P., Apanovitch, A. M., Pizarro, J., McCarthy, D., Zullo, J., et al. (2001). *Health Psychology*, 20(4), 256-266.
- Schunk, D. H. (1981). Modeling and attribution efforts on childrens achievement: A self-efficacy analysis. *Journal of Educational Psychology*, 73, 93-105.
- Sherer, M., Maddux, J., Mercadante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. (1982) The self-efficacy scale: Construction and validation. *Psychological Reports*, 51, 663-671.
- Stretcher, V., Becker, M., Kirscht, J., Eraker, S., & Graham-Tomasi, R. (1985). *Patient Education Counseling*, 7, 249-262.
- Turner, S., & Lapan, R. T. (2002, September). Career self-efficacy and perceptions of parent support in adolescent career development. *Career Development Quarterly* Retrieved March 9, 2004, from http://www.articles.findarticles.com/p/articles/mi_m0JAX/is_1_51ai_92036446.
- Underwood, S. (1999). Breast cancer screening among African American Women: Addressing the needs of African American women with known and no known risk factors. *Journal of the National Black Nurses Association*, 10 (1), 46-55.
- U.S. Department of Health and Human Services. (2000). *Health United States, Socioeconomic Status and Health Chartbook*. Washington, DC.
- Webb. S. J. (2004). The development and exploration of a culturally-enhanced breast health measure & the relationship of selected cultural attributes to knowledge, beliefs, and behaviors for early breast cancer detection among African American women. Unpublished doctoral dissertation, Southern University and A & M College, Baton Rouge, LA.
- Websters II new college dictionary. (1999). Boston: Houghton Mifflin.
- Wood, R. E., Bandura, A., & Bailey, T. (1990). Mechanisms governing organizational performance in complex decision-making environments. *Organizational Behavior and Human Decision Processes*, 46, 181-201.

Author Contact Information:

Dr. Constance S. Hendricks

Hampton University School of Nursing
Hampton Virginia

Phone: 757-727-5654

Fax: 757-727-5423

E-mail: constance.hendricks@hamptonu.edu