

2011

# Health Promotion Model Manual

Pender, Nola J.

---

<http://hdl.handle.net/2027.42/85350>

# **The Health Promotion Model**

## **Manual**

Nola Pender, PhD, RN, FAAN  
Professor Emerita  
University of Michigan  
Distinguished Professor  
Loyola University Chicago

Website: <http://nursing.umich.edu/faculty-staff/nola-j-pender>

E-mail: [npender@umich.edu](mailto:npender@umich.edu)

## Table of Contents

Overview of Health Promotion Model (HPM)	2
Key Concepts in Nursing Defined as a Basis for the Health Promotion Model	3
Definitions of Components of Model	4
HPM Assumptions	5
HPM Theoretical Propositions	5
Clinical Assessment for Health Promotion Plan	
Increasing Physical Activity	7
Clinical Assessment for Health Promotion Plan	
Improving Nutrition	9
Interventions to Address Influences on Health Behaviors	
Increasing Physical Activity	12
Instruments to Measure HPM Variables	13
Psychometric Properties of Sample Instruments	14
Pender and Colleagues Publications	15
Lusk and Colleagues Publications	17

## Overview of Health Promotion Model

**Purpose:** Assist nurses in understanding the major determinants of health behaviors as a basis for behavioral counseling to promote healthy lifestyles

**History:** First appeared in nursing literature in 1982  
Model revised in 1996 based on changing theoretical perspectives and empirical findings

**Research:** Studies on the model have been conducted over a period of 27 years

**Philosophical Roots:** Reciprocal Interaction World View in which humans are viewed holistically, but parts can be studied in the context of the whole. Human beings interact with their environment and shape it to meet their needs and goals.

**Theoretical Roots:** Expectancy value theory – Individuals engage in actions to achieve goals that are perceived as possible and that result in valued outcomes.  
Social cognitive theory – Thoughts, behavior, and environment interact. For people to alter how they behave, they must alter how they think

**Brief Description:** The model identifies background factors that influence health behavior. However, the central focus of the model is on eight beliefs that can be assessed by the nurse. These eight beliefs are critical points for nursing intervention. Using the model and working collaboratively with the patient/client, the nurse can assist the client in changing behaviors to achieve a healthy lifestyle.

## **Key Concepts in Nursing Defined as a Basis for the Health Promotion Model**

**Person** is a biopsychosocial organism that is partially shaped by the environment but also seeks to create an environment in which inherent and acquired human potential can be fully expressed. Thus, the relationship between person and environment is reciprocal. Individual characteristics as well as life experiences shape behaviors including health behaviors.

**Environment** is the social, cultural and physical context in which the life course unfolds. The environment can be manipulated by the individual to create a positive context of cues and facilitators for health-enhancing behaviors.

**Nursing** is collaboration with individuals, families, and communities to create the most favorable conditions for the expression of optimal health and high-level well-being.

**Health** in reference to the individual is defined as the actualization of inherent and acquired human potential through goal-directed behavior, competent self-care, and satisfying relationships with others, while adjustments are made as needed to maintain structural integrity and harmony with relevant environments. Health is an evolving life experience. There are definitions for family health and community health that have been proposed by other authors.

**Illnesses** are discrete events throughout the life span of either short (acute) or long (chronic) duration that can hinder or facilitate one's continuing quest for health.

## **Definitions of Components of Model**

### **Individual Characteristics and Experiences**

Prior related behavior – frequency of the same or similar health behavior in the past

Personal factors (biological, psychological, sociocultural) – general characteristics of the individual that influence health behavior such as age, personality structure, race, ethnicity, and socioeconomic status.

### **Behavior-Specific Cognitions and Affect**

Perceived benefits of action – perceptions of the positive or reinforcing consequences of undertaking a health behavior

Perceived barriers to action – perceptions of the blocks, hurdles, and personal costs of undertaking a health behavior

Perceived self-efficacy – judgment of personal capability to organize and execute a particular health behavior; self-confidence in performing the health behavior successfully

Activity-related affect – subjective feeling states or emotions occurring prior to, during and following a specific health behavior

Interpersonal influences (family, peers, providers): norms, social support, role models – perceptions concerning the behaviors, beliefs, or attitudes of relevant others in regard to engaging in a specific health behavior

Situational influences (options, demand characteristics, aesthetics) – perceptions of the compatibility of life context or the environment with engaging in a specific health behavior

Commitment to a plan of action -- intention to carry out a particular health behavior including the identification of specific strategies to do so successfully

Immediate competing demands and preferences – alternative behaviors that intrude into consciousness as possible courses of action just prior to the intended occurrence of a planned health behavior

### **Behavioral Outcome- Health Promoting Behavior**

Health promoting behavior – the desired behavioral end point or outcome of health decision-making and preparation for action

### **HPM Assumptions**

The HPM is based on the following assumptions, which reflect both nursing and behavioral science perspectives:

1. Persons seek to create conditions of living through which they can express their unique human health potential.
2. Persons have the capacity for reflective self-awareness, including assessment of their own competencies.
3. Persons value growth in directions viewed as positive and attempt to achieve a personally acceptable balance between change and stability.
4. Individuals seek to actively regulate their own behavior.
5. Individuals in all their biopsychosocial complexity interact with the environment, progressively transforming the environment and being transformed over time.
6. Health professionals constitute a part of the interpersonal environment, which exerts influence on persons throughout their lifespan.
7. Self-initiated reconfiguration of person-environment interactive patterns is essential to behavior change.

### **HPM Theoretical Propositions**

Theoretical statements derived from the model provide a basis for investigative work on health behaviors. The HPM is based on the following theoretical propositions:

1. Prior behavior and inherited and acquired characteristics influence beliefs, affect, and enactment of health-promoting behavior.
2. Persons commit to engaging in behaviors from which they anticipate deriving personally valued benefits.
3. Perceived barriers can constrain commitment to action, a mediator of behavior as well as actual behavior.
4. Perceived competence or self-efficacy to execute a given behavior increases the likelihood of commitment to action and actual performance of the behavior.
5. Greater perceived self-efficacy results in fewer perceived barriers to a specific health behavior.
6. Positive affect toward a behavior results in greater perceived self-efficacy.
7. When positive emotions or affect are associated with a behavior, the probability of commitment and action is increased.
8. Persons are more likely to commit to and engage in health-promoting behaviors when significant others model the behavior, expect the behavior to occur, and provide assistance and support to enable the behavior.
9. Families, peers, and health care providers are important sources of interpersonal influence that can increase or decrease commitment to and engagement in health-promoting behavior.
10. Situational influences in the external environment can increase or decrease commitment to or participation in health-promoting behavior.
11. The greater the commitment to a specific plan of action, the more likely health-promoting behaviors are to be maintained over time.

12. Commitment to a plan of action is less likely to result in the desired behavior when competing demands over which persons have little control require immediate attention.
13. Commitment to a plan of action is less likely to result in the desired behavior when other actions are more attractive and thus preferred over the target behavior.
14. Persons can modify cognitions, affect, interpersonal influences, and situational influences to create incentives for health promoting behavior.

Source: Pender, N.J., Murdaugh, C. L., & Parsons, M.A. (2011).

Health Promotion in Nursing Practice (6<sup>th</sup> Edition). Boston, MA: Pearson.



**Health Promotion Model**  
**Clinical Assessment for Health Promotion Plan**

**Example: Increasing Physical Activity**

Assess current stage of physical activity [pre-contemplation (PC), contemplation (C), planning/preparation (P), action (A), maintenance (M)]. If in stages C, P, or A, continue. If in stage M, reinforce positive behavior. If in stage PC, reinforce benefits of physical activity, and assess readiness at a later time.

**Prior Behavior**

What attempts have you made in the past to be physically active?

---

---

---

What did you learn from these experiences?

---

---

---

**Personal Influences**

What are the personal **benefits** of becoming more active?

---

---

---

What problems (**barriers**) might you have trying to be more active?

---

---

---

How sure are you (**self-efficacy**) that you can overcome these barriers to being more active?

1    2    3    4    5    6    7    8    9    10  
Uncertain Very Sure

What physical activities do you enjoy most? (**activity-related affect**)

---

---

**Interpersonal Influences**

**Social Norms** - Do any of your family members or friends expect you to be physically active? Yes No

If so, who? \_\_\_\_\_

**Social Support** - Who will encourage you to be active or be active with you?

\_\_\_\_\_

**Role Models** - Is anyone in your family or any of your friends physically active 3-5 times every week? Yes No

If so, who, and what do they do?

\_\_\_\_\_

**Situational Influences**

Where could you be physically active doing what you enjoy?

\_\_\_\_\_

**Commitment to a Plan of Action**

Are you ready to set goals and develop a plan to become more active? Yes No

Steps of Plan

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Competing Demands and Preferences (At Follow-up)**

What problems did you encounter in trying to be more active?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How can you avoid these problems in the future?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Interpersonal Influences**

**Social Norms** - Do any of your family members or friends expect you to eat healthy foods? Yes No

If so, who, and what do they do?

---

**Social Support** - Who will encourage you to eat healthy meals and eat them with you?

---

**Role Models** - Do any of your family members or friends eat healthy meals most of the time? Yes No

If so, who?

---

What do they eat?

---

---

---

**Situational Influences**

Where can you find healthy foods to eat that you enjoy?

Work? 

---

Home? 

---

Other? 

---

**Commitment to a Plan of Action**

Are you ready to set goals and develop a plan to eat healthier meals? Yes No

Steps of Plan for Healthy Eating

---

---

---

---

**Competing Demands and Preferences (At Follow-up)**

What problems did you encounter in trying to eat healthier foods?

---

---

---

How can you avoid these problems in the future?

---

---

---

**Health Promotion Model**  
**Interventions to Address Influences on Health Behaviors**  
**Example: Increasing Physical Activity**

**Individual Characteristics and Experiences**

**Prior Behavior** – Reinforce strengths of client and build on past successes and failures

**Personal Influences**

1. **Benefits** – Reinforce or expand vision of advantages
2. **Barriers** – Discuss how barriers to being more active can be worked out
3. **Self-efficacy** - Have try modest increase in activity to experience success, persuade of success, reinforce success, link with models of physical activity, focus on positive sensations.
4. **Activity-related Affect** – Help plan enjoyable activities into schedule

**Interpersonal Influences**

5. **Social norms** - Encourage family and friends to increase expectations of activity
6. **Social support** – Help client use social support by asking family and friends to be active with him/her or provide support to do so (encouragement, reward, family contract)
7. **Role models** – Plan increased interaction with persons who are physically active

**Situational Influences**

8. **Options** – help select attractive, cost-effective, and safe locations for favorite activity

**Commitment to a Plan of Action**

9. **Goal Setting** – Set realistic goals for action and integrate into daily and weekly schedule

**Competing Demands and Preferences**

10. **Unanticipated Difficulties** - Work cooperatively with the client to develop a plan to avoid competing demands and preferences

**Ongoing Evaluation** - Follow up to see if plan worked. Readjust plan as needed.

## **Instruments to Measure Health Promotion Model Variables**

### *Behavior-Specific Cognitions and Affect*

Perceived Benefits of Action (Adolescent Version)

Perceived Barriers to Action (Adolescent Version)

Exercise Benefits/Barriers Scale [EBBS] (Adult Version)

Perceived Self-Efficacy [Task Efficacy for Treadmill Walking] (Adolescent Version)

Perceived Self-Efficacy [Self-Regulatory Efficacy for Overcoming Barriers] (Adolescent Version)

Activity-Related Affect

The Physical Activity Enjoyment Scale was used to measure this variable. Please see the following article for information about the Physical Activity Enjoyment Scale: Motl, R.W., Dishman, R. K., Saunders, R., Dowda, M., Felton, G., Pate, R.R. (2001). Measuring enjoyment of physical activity in adolescent girls. *American Journal of Preventive Medicine*, 21(2), 110-117.

### *Interpersonal Influences*

Exercise Norms Scale (Adolescent Version)

Exercise Role Models Scale (Adolescent Version)

Exercise Social Support Scale (Adolescent Version)

### *Situational Influences*

Situational Influences [Options] (Adolescent Version)

### *Commitment to a Plan of Action*

Planning for Exercise (Adolescent Version)

### *Immediate Competing Preferences*

Preference Profile (Adolescent Version)

### *Health Promoting Behavior*

Health Promoting Lifestyle Profile II [HPLP II] (Adult Version)

The Adolescent Lifestyle Profile

Refer to: Hendricks, C., Murdaugh, C., & Pender, N., (2006). The adolescent lifestyle profile: Development and psychometric characteristics. *Journal of National Black Nurses Association*, 17(2), 1-5.

**Health Promotion Model**  
**Psychometric Properties of Instruments**

<u>Instrument</u>	<u>Test-Retest Reliability</u>	<u>Cronbach's Alpha</u>
Benefits of Action	.86	.75 - .88
Barriers to Action	.75	.75 - .84
Exercise Benefits/Barriers Scale (2 weeks – T/RT)	.89 (total instrument) .89 (benefits scale) .77 (barriers scale)	.95 (total instrument) .95 (benefits scale) .86 (barriers scale)
Task Efficacy (Treadmill Walking) (5-7 days – T-RT) (Cronbach's alpha not calculated due to structure of scale)	.90	
Self-Regulator Efficacy (5-7 days – T-RT)	.77	.87
Exercise Norms Scale (Cronbach's alpha not calculated due to structure of scale)	.76	
Exercise Role Model Scale (Cronbach's alpha not calculated due to structure of scale)	.84	
Exercise Social Support Scale (Cronbach's alpha not calculated due to structure of scale)	.82	
Situational Influences on Exercise (Cronbach's alpha not calculated due to structure of scale)	.72 Kuder-Richardson	
Planning for Exercise (2 wk – T-RT)	.90	.82
Adolescent Preference Profile	.90	.78
Health Promoting Lifestyle Profile II	.89	.94
The Adolescent Lifestyle Profile		.92



## Pender's Health Promotion Model

### Pender and Colleagues Publications in Refereed Journals

- Walker, S.N., Sechrist, K.R., & Pender, N.J. (1987). The health-promoting lifestyle profile: Development and psychometric characteristics. *Nursing Research*, 36(2), 76-80.
- Sechrist, K.R., Walker, S.N., & Pender, N.J. (1987). Development and psychometric evaluation of the Exercise Benefits/Barriers Scale. *Research in Nursing and Health*, 10, 357-365.
- Walker, S.N., Volkan, K., Sechrist, K.R., & Pender, N.J. (1988). Health-promoting lifestyles of older adults: Comparison with young and middle-aged adults, correlates and patterns. *Advances in Nursing Science*, 11(1), 76-90.
- Pender, N.J., Walker, S.N., Sechrist, K.R., & Stromborg, M.F. (1988). Development and testing of the Health Promotion Model. *Cardiovascular Nursing*, 24(6), 41-43.
- Walker, S.N., Kerr, M.J., Pender, N. J. & Sechrist, K.R. (1990) A Spanish version of the health-promoting lifestyle profile. *Nursing Research*, 39, 268-273.
- Pender, N.J., Walker, S.N., Stromborg, M.F., & Sechrist, K.R. (1990). Predicting health-promoting lifestyles in the workplace. *Nursing Research*. 39 (6), 326-332.
- Stromborg, M. F., Pender, N. J., Walker, S. N., & Sechrist, K. R. (1990). Determinants of health-promoting lifestyle in ambulatory cancer patients. *Social Science and Medicine*. 31 (10), 1159-1168.
- Garcia, A.W., Broda, M.A., Frenn, M., Coviak, C., Pender, N.J., Ronis, D.L. (1995). Gender and developmental differences in exercise beliefs among youth and prediction of their exercise behavior. *Journal of School Health*, 65(6), 213-219.
- Garcia, A.W., Pender, N.J., Antonakos, C.L., & Ronis, D.L. (1998). Changes in physical activity beliefs and behaviors of boys and girls across the transition to junior high school. *Journal of Adolescent Health*. 22(5), 394-402.
- Shin, Y.H., Jang, H.J., & Pender, N.J. (2001). Psychometric evaluation of the exercise self-efficacy scale among Korean adults with chronic diseases. *Research in Nursing and Health*. 24, 68-76.
- Wu, T.Y., & Pender, N.J. (2001). Determinants of physical activity among Taiwanese adolescents. An application of the Health Promotion Model. *Research in Nursing and Health*, 25, 25-36.
- Wu, T. Y., Ronis, D., Pender, N., & Jwo, J. L. (2002). Development of questionnaires to measure physical activity cognitions among Taiwanese adolescents. *Preventive Medicine*, 35, 54-64.
- Wu, T.Y., Pender, N.J., & Yang, K.P. (2002). Promoting physical activity among Taiwanese and American adolescents. *Journal of Nursing Research*, 10(1), 57-64.
- Robbins, L.B., Pender, N.J., Kazanis, A.S. (2003). Barriers to physical activity perceived by adolescent girls. *Journal of Midwifery and Women's Health*, 48(3), 206-212.

- Shin, Y.H., Pender, N.J., Yun, S.K. (2003). Using methodological triangulation for cultural verification of Commitment to a Plan for Exercise Scale among Korean adults with chronic diseases. *Research in Nursing and Health*, 26, 312-321.
- Wu. T.Y., Pender, . J., Noureddine, S. (2003). Gender differences in the psychosocial and cognitive correlates of physical activity among Taiwanese adolescents: A structural equation modeling approach. *International Journal of Behavioral Medicine*, 10(2), 93-105.
- Robbins, L.B., Pis, M.B., Pender, N.J., Kazanis, A.S. (2004). Exercise self-efficacy, enjoyment, and feeling states among adolescents. *Western Journal of Nursing Research*, 26(7), 699-715.
- Robbins, L.B., Pis, M.B., Pender, N.J. & Kazanis, A.S. (2004). Physical activity self-definition among adolescents. *Research and Theory for Nursing Practice: An International Journal*, 18 (4), 317-330.
- Robbins, L.B., Pender, N.J., Ronis, D.L., Kazanis, A. (2004). Physical activity, self-efficacy, and perceived exertion among adolescents. *Research in Nursing and Health*, 27(6), 435-446.
- Shin, Y. H., Yun, S.K., Pender, N.J., Jang, H.J. (2005). Test of the health promotion model as a model of commitment to a plan for exercise among Korean adults with chronic disease *Research in Nursing and Health*, 28(2), 117-125.
- Hendricks, C., Murdaugh, C. & Pender, N. (2006). The adolescent lifestyle profile: Development and psychometric characteristics. *Journal of National Black Nurses Association*, 17(2), 1-5.
- Robbins, L.B. Gretebeck, K.A., Kazanis, A.S., Pender, N.J. (2006). Girls on the Move program to increase physical activity participation. *Nursing Research*, 55(3), 206-216.

### **Books**

- Pender, N.J., Murdaugh, C., & Parsons, M.A. (2011). *Health Promotion in Nursing Practice* (6th ed.). Boston, MA: Pearson.  
 Note: The 4th and 5th Editions can also be used as they have detailed descriptions of the Health Promotion Model.

## **Pender's Health Promotion Model**

### **Lusk and Colleagues Publications in Refereed Journals**

- Lusk, S.L. & Kelemen, M.J. (1993). Predicting use of hearing protection: A preliminary study. *Public Health Nursing*, 10(3), 189-196.
- Lusk, S.L., Ronis, D.L., Kerr, M.J., & Atwood, J.R. (1994). Test of the Health Promotion Model as a causal model of workers' use of hearing protection. *Nursing Research*, 43(3), 151-157.
- Lusk, S.L., Ronis, D.L., & Kerr, M.J. (1995). Predictors of workers' use of hearing protection: Implications for training programs. *Human Factors, The Journal of the Human Factors and Ergonomics Society*, 37(3), 635-640.
- Lusk, S.L., Ronis, D.L., & Hogan, M.M. (1997). Test of the Health Promotion Model as a causal model of construction workers' use of hearing protection. *Research in Nursing and Health*, 20(3), 183-194.
- Lusk, S.L., Kerr, M.J., Ronis, D.L., & Eakin, B.L. (1999). Applying the Health Promotion Model to development of a worksite intervention. *American Journal of Health Promotion* 13(4), 219-227.
- Lusk, S.L., Hong, O.S., Ronis, D.L., Kerr, M.J., Eakin, B.L., & Early, M.R. (1999). Test of the effectiveness of an intervention to increase use of hearing protection devices in construction workers. *Human Factors*, 41(3), 487-494.
- Eakin, B.L., Brady, J. S., Lusk, S.L., (2001) Creating a tailored, multimedia, computer based intervention. *Computers in Nursing*. 19 (4), 152-163.
- McCullagh, M., Lusk, S.L., Ronis, D.L., (2002) Factors influencing use of hearing protection among farmers: A test of the Pender Health Promotion model. *Nursing Research*, 51 (1) 33-39.
- Kerr, M.J., Lusk, S.L., & Ronis, D.L. (2002). Explaining Mexican American workers' hearing protection use with Health Promotion Model. *Nursing Research*, 51 (2), 100-109.
- Ronis, D.L. (2006). Comparison of the original and revised structures of the Health Promotion Model in predicting construction workers use of hearing protection. *Research in Nursing and Health*, 29: 3-17.