



Everyday Theory: A Practical Application of the Ecological Perspective

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ABSTRACT

Knowledge of health behavior theory allows health practitioners to design health promotion interventions that are based on factors that influence behavior. **Objectives:** At the conclusion of this lesson, students will be able to: (1) identify and define the three major levels of influence of the Ecological Perspective, (2) identify how each level of the Ecological Perspective impacts the health of community members described in an enclosed case study, and (3) develop an intervention strategy to improve the health of community members described in the enclosed case study. **Target Population:** Because the application of health behavior theory is a topic pertinent to numerous disciplines, individuals studying health education, health promotion, public health, evaluation and assessment, and social work may benefit from this lesson.

Barry A, Honoré H. Everyday theory: A practical application of the ecological perspective. *Am J Health Educ.* 2009;40(6):368-372.

INTRODUCTION

Behavioral theory not only offers methods for understanding why individuals engage in behavior that may compromise their health, but also why people adopt behaviors that protect or improve their health.^{1,2} Additionally, theory provide public health practitioners with a “systematic” framework for developing health behavior interventions by providing “tools for moving beyond intuition to design and evaluate health behavior and health promotion interventions based on understanding of behavior.”³ (p4) Consequently, the application of theory in social sciences, such as health education and promotion, can contribute to improved individual, family or neighborhood health within communities.⁴

The purpose of this paper is to describe how health behavior theory can be used as a framework to assist health education and promotion practitioners in the creation of public health interventions. More specifically, the Ecological Perspective (EP) will be

presented as a heuristic example of how to apply health behavior theory in a community health agency setting. The EP was selected because, through it, the interdependence of multiple factors associated with a public health concern is stressed.³

OBJECTIVES

At the conclusion of this teaching idea, students will be able to:

- Identify and define the three major levels of influence of the Ecological Perspective.
- Identify how each level of the Ecological Perspective impacts the health of community members described in an enclosed case study.
- Develop an intervention strategy to improve the health of community members described in the enclosed case study.

TARGET POPULATION

This lesson was designed for college students at the undergraduate and graduate levels. Because the application of health

behavior theory is a topic pertinent to numerous disciplines, individuals studying health education, health promotion, public health and evaluation and assessment may benefit from this lesson.

PROCEDURE

The following lesson is intended to take approximately 50 minutes, or, in most instances, one class period. If it is necessary due to time constraints, however, the assessment piece may be used as a take-home assignment.

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Step 1: Present the Ecological Perspective

Instructors should present the following key characteristics of the Ecological Perspective (EP). First, through EP, behaviors that simultaneously cause and result from “multiple levels of influence”^{3 (p10)} are taken into account. Second, by way of EP, individual behavior reciprocally determines (i.e., shapes, and is shaped by) the social environment.³ Consequently, EP is thought of as emphasizing individuals’ interaction with their physical *and* social environment. By understanding EP, it becomes clear that internal and external factors affecting an individual’s or group’s health behavior should be considered when developing an intervention to improve health. By considering numerous levels of influence on behaviors concerning public health (e.g., binge drinking among Greek fraternity members), health educators may more accurately account for the diverse factors shaping individual or group health behavior. Thus, the EP’s multilevel approach provides health promotion program developers insight into how to “attack” a public health concern.⁵

In order to explain how individual or group behavior is affected by multiple factors (e.g., personal, social, environmental), McLeroy, Bibeau, Steckler and Glanz outlined five distinct levels of influence.⁶ The authors of this paper recommend, however,

that the ecological perspective be presented as comprising three major levels of influence: *intrapersonal*, *interpersonal* and *community*. This three-level approach is outlined by The National Cancer Institute’s *Theory at a Glance: A Guide for Health Promotion Practice* and is recommended because interventions at the community level necessitate accounting for institutional, public policy and community factors, as well as social norms.⁷ Instructors should use the operational definitions and descriptions outlined in Figure 1 to present the various levels of influence proposed by the EP.

Presentation of the EP should conclude with the following take home points:

- No one factor singularly influences people’s behavior.
- Not performing (or performing) a health behavior is the result of *multiple* factors.

Step 2: Provide Students a Case Study

The second step of this lesson is to provide students a hard copy of the community case study outlined in Figure 2. Recommended for teachers is that they read the case study aloud to the class.

Step 3: Guided Discussion

After reading through the case study as a class, the instructor should engage students in a guided discussion concerning applying the EP levels of influence to intervention

activities. Specific examples for each level of influence, as well as relevant intervention strategies, are provided below to assist the instructor in facilitating the discussion. Moreover, if students do not offer the “*Potential Answer*” provided, instructors may use the answer to stimulate conversation and/or further illustrate the level of influence.

EP Intrapersonal Level

Class Discussion Prompt: Define the intrapersonal level of influence.

Answer: Focus on knowledge, attitudes, behaviors and other characteristics of these individuals.

Class Discussion Prompt: Using the case study, provide an example of how a community member’s health is being affected at the intrapersonal level.

Potential Answer: Residents in the housing development feel unsafe because the development has limited numbers of light posts and internal lighting in stairwells. They believe that low-light areas provide gang members and drug dealers with space to plan and perform criminal activities (i.e., attitude towards safety levels within the housing development).

Class Discussion Prompt: Provide an intervention strategy for intrapersonal level factors.

Potential Answer: Relevant intervention activities might include recruitment for a

Figure 1. The Social Ecological Perspective Levels of Influence

| Level of Influence | Description |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Intrapersonal | Personal factors such as awareness, knowledge, attitudes, motivations, beliefs, personality traits and biophysical characteristics |
| Interpersonal | Factors relating to one’s social support and interactions with family, friends and peers (i.e., circle of influence). |
| Community | |
| Institutional | Organizational characteristics such as policies, rules and regulations. |
| Community | Social systems (i.e., networks and norms) present between individuals, groups and/or organizations. |
| Public Policy | Laws, statutes, regulations or policies at the local, state and federal level. |

*Note: This chart is adapted from National Cancer Institute’s *Theory at a Glance: A guide for health promotion practice*. 2nd Ed – “An Ecological Perspective: Levels of Influence.”



Figure 2. Community Case Study

A local housing development's residents association has asked the local health department to assist them in developing a health promotion program. You are the Community Health Educator assigned to oversee this project. After visiting with the local residents you determine the following:

- The housing development is located within a working class neighborhood and in decent condition; however, several needed repairs are noticeable (e.g., nonfunctioning light posts and open security gates).
- The development is bordered by two universities and a number of low-income rental properties.
- The neighborhood church is relatively small, but as typical of church membership, it spans all ages.
- Small, independent businesses and mini-malls serve as local congregation areas for the area's youth.
- Preliminary demographics for the housing development indicate that its residents are primarily Black/African American and Hispanic/Latino families who subsist on annual mean incomes less than \$12,000 per year.
- The majority of tenants are senior citizens, physically disabled, or school-age children.
- A host of social and economic issues are present. For instance, the majority of residents identify end-of-the-month food shortages, poor nutritional habits, drug-related violence, high rates of truancy, high rates of gang membership and a lack of after-school program options for school-age children as their 'most important' health and safety issues.

Your supervisor has requested that you develop an intervention activity to address some of the identified needs. Furthermore, your supervisor requested that you should use the Ecological Perspective as the theoretical foundation for your proposed intervention activities.

Neighborhood Watch program or assisting residents in planning and implementing an advocacy campaign directed at the development's management team and local housing department officials focused on improving safety measures. Additional activities might include inviting speakers from the local police department or the *Safe and Drug Free Schools and Communities* program to speak with residents concerning access to existing anti-violence and drug programs and resources. These activities likely will affect residents' attitudes and beliefs regarding the safety of their housing development.

EP Interpersonal Level

Class Discussion Prompt: Define the interpersonal level of influence.

Answer: Focus on the dynamic between individuals and their "circle of influence."

Class Discussion Prompt: Using the case study, provide an example of how the community member's health is being affected at the interpersonal level.

Potential Answer: The majority of area youth congregate around the local small, independent businesses and mini-malls after school. The lack of educational afterschool programs or supervised, safe options for youth exposes housing development youth to the influence of local gang members and

their associated high-risk health behaviors (e.g., drug dealing, violence, firearms).

Class Discussion Prompt: Provide an intervention strategy for interpersonal level factors.

Potential Answer: Organizing a supervised physical activity, such as basketball, for area youth could be provided a safe, healthy alternative to loitering and potential harmful members of local area gangs.

EP Community Level – Institutional Factors

Class Discussion Prompt: Define the institutional factors at the community level of influence.

Answer: Focus on institutional characteristics of these organizations as well as potential inter-organizational collaboration and/or competition.

Class Discussion Prompt: Using the case study, provide an example of how the community member's health is being affected by institutional factors at the community level.

Potential Answer: The local school district's administration (e.g., a government organization) has expressed concerns related to high truancy and drop-out rates of school-age children and adolescents who live in the housing development. In addition, a large number of these students fail to pass

the state's mandatory assessment tests and cannot obtain high school diplomas.

Class Discussion Prompt: Provide an intervention strategy for institutional factors at the community level.

Potential Answer: Relevant intervention activities might include organizing a coalition of community members, church leaders, and local Parent Teacher Associations, which focused on developing an afterschool program designed to foster academic success by providing tutoring and mentorship. School teachers and guidance counselors also might provide student referrals to anti-drug or violence mentoring programs. This coalition also may serve as a mediator in facilitating communication between community leaders and the local school's administrations and truancy officers. Information exchanged might include identifying who is truant, where these individuals congregate during school hours, and what behaviors occur while truant. Activities such as these will impact the organizational structure of the housing development and school.

EP Community Level – Community Factors

Class Discussion Prompt: Define the community factors at the community level of influence.



Answer: Focus on potential interactions among individuals, small groups, neighborhoods, and organizations.

Class Discussion Prompt: Using the case study, provide an example of how the community member's health is being affected by community factors at the community level.

Potential Answer: Local businesses and homeowners regularly voice concerns related to criminal activity within and surrounding the housing development. They routinely request additional police patrols of the neighborhood to control increasing crime rates.

Class Discussion Prompt: Provide an intervention strategy for community factors at the community level.

Potential Answer: Intervention activities might include recruitment for a joint resident-business owner *Neighborhood Watch* program or hosting a "town-hall" meeting

of key stakeholders (e.g., residents, local business owners, development management, police, and key city council members) to discuss potential methods for improving neighborhood safety. By providing these activities, the interactions between all members of the community can be impacted.

EP Community Level - Public Policy

Class Discussion Prompt: Define public policy at the community level of influence.

Answer: Focus on how these regulations affects other levels of influence in the ecological model.

Class Discussion Prompt: Using the case study, provide an example of how the community member's health is being affected by Public Policy at the community level.

Potential Answer: A number of residents within the housing development are related, though they reside in separate units. When resources reach critical levels prior to the end of the month, these family members and

their neighbors often share food or exchange goods and services (e.g., transportation, babysitting).

Class Discussion Prompt: Provide an intervention strategy for public policy at the community level.

Potential Answer: Invite representatives from the local health department and other social service agencies to present information related to community programs and resources. Specific examples might include the *Children's Insurance Program* (CHIP), the *Women, Infants, and Children* (WIC) food voucher program, local food pantries and agencies specializing in transportation and child care assistance for low-income individuals and families. Program representatives could provide necessary enrollment forms and assist families in completing required paperwork. By providing easier access to these services, the overall social support received by residents would be affected.

Figure 3. Grading Rubric

| Grading Criteria | Point Value | Was Criteria Met? |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level of Influence | 2 points (20%) | |
| <ul style="list-style-type: none"> ▪ Identifies the level of influence their intervention is based on. | | <ul style="list-style-type: none"> ▪ Properly Identified (2 points) ▪ Inaccurately / Not identified (0 points) |
| Influence on Community | 2 points (20%) | |
| <ul style="list-style-type: none"> ▪ Identifies "how" this level of influence affects the community's health. | | <ul style="list-style-type: none"> ▪ Excellent (2 points) ▪ Partial explanation (1 point) ▪ Inaccurately / Not explained (0 points) |
| Intervention Strategy | 4 Points (40%) | |
| <ul style="list-style-type: none"> ▪ Outlines an intervention strategy to improve community member's health. | | <ul style="list-style-type: none"> ▪ Excellent (4 points) ▪ Strategy not clearly outlined (2 point) ▪ No strategy provided; Strategy clearly inappropriate (0 points) |
| Overall Presentation | 2 Points (20%) | |
| <ul style="list-style-type: none"> ▪ Uses professionally appropriate language ▪ Free from grammatical errors | | <ul style="list-style-type: none"> ▪ Excellent (2 points) ▪ Minimal errors (1 points) ▪ Clear lack of editing (0 points) |



ASSESSMENT TECHNIQUE

Students will be required to create a document detailing a potential intervention strategy for this community. More specifically, students should:

- Identify the EP level of influence upon which this intervention is based.
- Identify how the community member's health is being influenced by the selected level of influence.
- Identify how this intervention activity will improve the overall health of community members.

Instructors should utilize the rubric outlined in Figure 3 to assess the report prepared by each student. Point values for this activity may be adjusted as the instructor

deems appropriate. Should students need additional time outlining their intervention strategy, instructors may allow the documents to be turned in at the beginning of the next class period.

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