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Environmental Quality, Human Development, and Health: An Ecological View

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Growing concerns about global environmental change and its impact on human health and development are substantially influencing the course of psychological research. The articles included in this special issue reflect these concerns and highlight several new directions of research at the interface of environmental, developmental, and health psychology. All of the articles share a common concern with the processes by which physical and social facets of the environment affect individuals' health and development and the overall quality of their lives. Moreover, this set of articles serves to underscore certain conceptual and methodological themes that are inherent in ecological analyses of human health, development, and quality of life (cf. Stokols, 1992).

A core assumption underlying ecological analyses of environment and well-being is that any situation or setting is comprised of multiple physical and social dimensions which jointly influence a variety of health and developmental outcomes. From this assumption, it follows that an adequate understanding of the links between environmental quality and well-being requires multilevel assessments of the ways in which different environmental factors impinge on diverse outcomes, including physiology, health status, lifespan development, and social cohesion.

The multifaceted nature of human environments and well-being is clearly reflected in the articles comprising this special issue. For example, the articles by Bell (1992) and Wisocki and King (1992) focus on microlevel and ambient features of the physical environment such as allergens (e.g., pollens and foods) and physical irritants (e.g., low light, high humidity). Similarly, an emphasis on physical conditions of the environment is reflected in Jasnosi's (1992) study of architectural and interior features of rooms (i.e., stimulus-poor and stimulus-rich environments) as they influence occupants' mood and cognitive performance. Similarly, Calvert and Cocking's (1992) study focuses on sociocultural facets of

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the environment (e.g., availability of social support, public opinion about sexually transmitted diseases) that influence the effectiveness of televised public service announcements in preventing AIDS and in countering health-threatening attitudes and behavior. Thus, the articles in this issue examine a wide range of physical and social environmental factors and reveal the diverse ways in which environmental settings can influence individual and collective well-being.

Another core assumption inherent in ecological analyses of well-being is that the health status of individuals is influenced not only by environmental factors but also by a variety of personal attributes including genetic heritage, psychological dispositions, and behavioral patterns. Thus, ecological analyses emphasize the dynamic interplay among diverse environmental and personal factors, rather than focusing exclusively on environmental, biological, or behavioral variables. Generally speaking, however, research in the field of health psychology has placed relatively greater emphasis on the role of biopsychobehavioral factors in health (e.g., psychoimmunological processes, personality dispositions, and sedentary lifestyle as they influence disease etiology), whereas environmental psychology has given greater emphasis to the role of the sociophysical environment (e.g., noise, spatial density, architectural and geographic conditions) as they affect people's experiences of stress and health problems. Integrative studies that address the links between biopsychobehavioral and sociophysical environmental factors in health have been less frequently reported in the research literature.

The articles included in this issue are important because they begin to bridge the dual emphases of health and environmental psychology on biopsychobehavioral and sociophysical predictors of well-being. For example, Jasnoski (1992) examines the role of individuals' susceptibility to seasonal affective disorder (SADS) and their responsiveness to novel stimuli (absorption ability) in mediating the complex relationships between physical environmental conditions (stimulus-poor vs. stimulus-rich rooms), and occupants' cognitive performance and mood. Calvert and Cocking (1992) examine the complex interdependencies among physical environmental factors (access to television), sociocultural conditions (public opinion, social support in different cultural contexts), and the targeted audience's developmental stage (e.g., children, adolescents, young adults) as they influence the effectiveness of televised AIDS prevention programs. Thus, these articles encompass a broad array of biopsychobehavioral and sociophysical environmental factors in health, and demonstrate the scientific value of integrating these diverse categories of variables in future studies of environmental quality, human development, and well-being.

Whereas much of the research in health psychology has emphasized "psychogenic" factors in health, the articles included in this issue reveal the diverse ways in which "envirogenic" processes can influence well-being. Stokols (1992) notes five envirogenic, or health-related, functions of the sociophysical environment. Specifically, the physical and social environment can function (a) as a *medium of disease transmission*, exemplified by waterborne and airborne diseases and the spread of contagious illnesses through interpersonal contact; (b) as

stressors that have detrimental effects on individuals' mood, performance, and health status; (c) as a *source of safety or danger* (e.g., residing in geographically or chemically hazardous areas); (d) as an *enabler of health behavior* (e.g., provision of safety belts and airbags in automobiles); and (e) as a *provider of health resources* (e.g., accessibility to health care services; quality of community sanitation systems). Each of these health-related functions of the sociophysical environment is reflected in the articles of this special issue.

For example, the role of the environment in transmitting pathogens, toxins, or physical irritants is examined in Bell's (1992) study of food-related and airborne allergens as they influence individuals' mood, depression, and tendencies toward shyness. Similarly, Wisocki and King (1992) examine people's opinions and beliefs about the role of various foods in promoting allergies and altering behavior. The role of the environment as a stressor is reflected in Jasnoski's (1992) finding that stimulus-poor rooms can lead to depressed mood among the room's occupants. And, Calvert and Cocking's (1992) study of the efficacy of televised messages in preventing AIDS and high-risk sexual behavior emphasizes the potential role of the sociophysical environment (TV programming) in facilitating health-promotive behavior and in providing additional community resources (e.g., telephone hotlines and support groups) to prevent the spread of HIV infection. Thus, the articles in this issue not only demonstrate the general relationship between environmental conditions and well-being, but also reflect the diverse processes that may explain this relationship.

Finally, the articles included in this issue are useful in that they suggest the potential benefits of linking behaviorally focused and environmentally oriented approaches to community health promotion. Much earlier research has emphasized singular strategies of disease prevention and health promotion (e.g., work-site executive wellness programs emphasizing the modification of unhealthy lifestyles). Yet, the advantages of developing more integrative programs, incorporating both behavioral and environmental modification strategies (e.g., life-style change, injury control, improved environmental design) are substantial (cf. Stokols, 1992). The present articles identify a variety of environmental "leverage" points for enhancing personal and community well-being (e.g., stimulus-rich settings, nonallergenic and nontoxic environments, adequate residential shelter, community health education programs) and, thereby, suggest the potential value of environmental restructuring as an increasingly important strategy of community health promotion.

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