

The Possibilities and Potential of Social Ecological Frameworks for Understanding Health Behavior

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Symposium Presented at the Annual Conference of the Society of Behavioral Medicine,
San Francisco, CA March 22, 2013

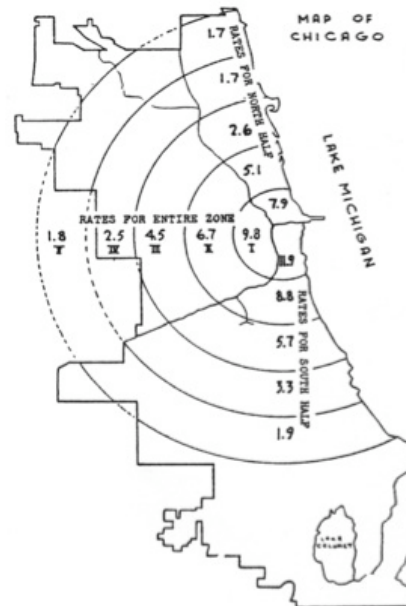
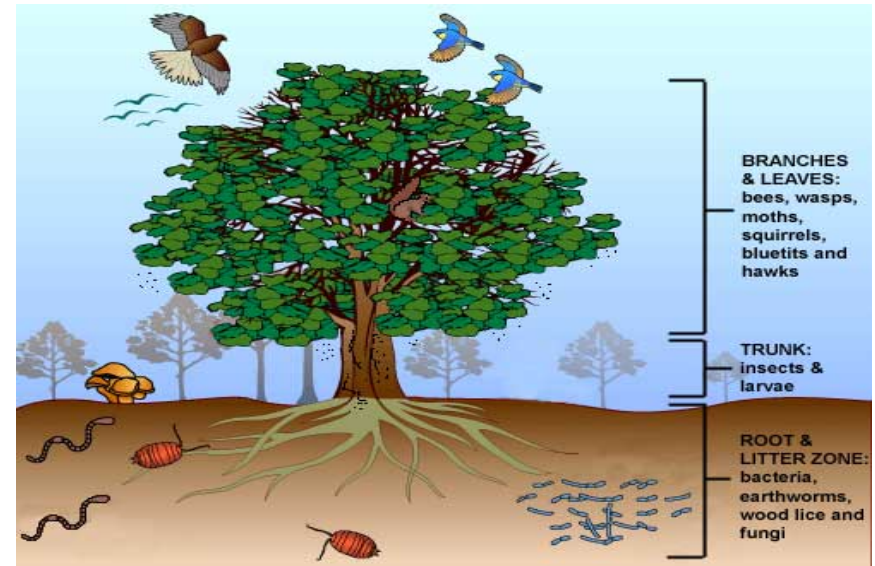
Social Ecological Frameworks for Understanding Health Behavior

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From Bioecology to Social Ecology

- Bio Ecology--study of the relations between organisms and their environments; field studies of plant and animal biomes over extended periods
- Human Ecology--study of the relations between people and their urban ecosystems with an emphasis on biological and economic processes of adaptation, and the spatial distribution of health and behavioral problems
- Social Ecology--study of the relations between people and their environments from a broad, interdisciplinary perspective that gives greater attention to the social, psychological, institutional, and cultural contexts of people-environment relations than did earlier human ecology research



Expansion of social-ecological systems science

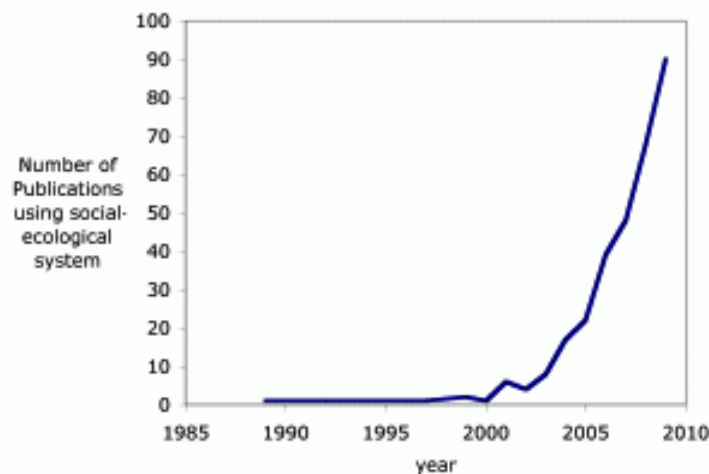
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by Garry Peterson

tags: bibliometrics, Carl Folke, Fikret Berkes, ISI, Marty Anderies, Per Olsson, social-ecological systems, Steve Carpenter

The concept of social-ecological systems has been gaining increased interest in science. Below is a graph showing papers whose topic includes social-ecological systems. During the 1990s there were a few publications and then a rapid rise during the 2000s. Two influential books articulated social-ecological ideas:

- ★ Linking social and ecological systems: Practices and Social Mechanisms for Building Resilience in 2000 and
- ★ Navigating social-ecological systems: building resilience for complexity and change in 2003 .



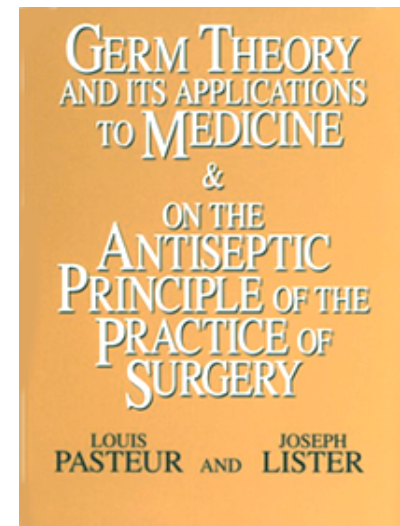
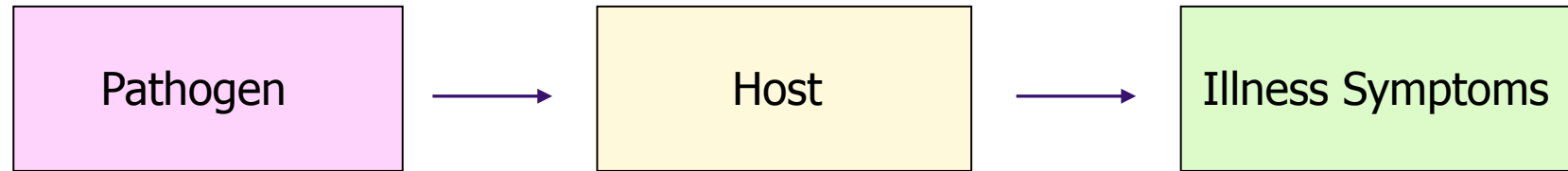
Papers from ISI - social-ecological or social ecological and Systems

<http://rs.resalliance.org/2010/04/16/expansion-of-social-ecological-systems-science/>

Paradigms for Understanding Health and Illness

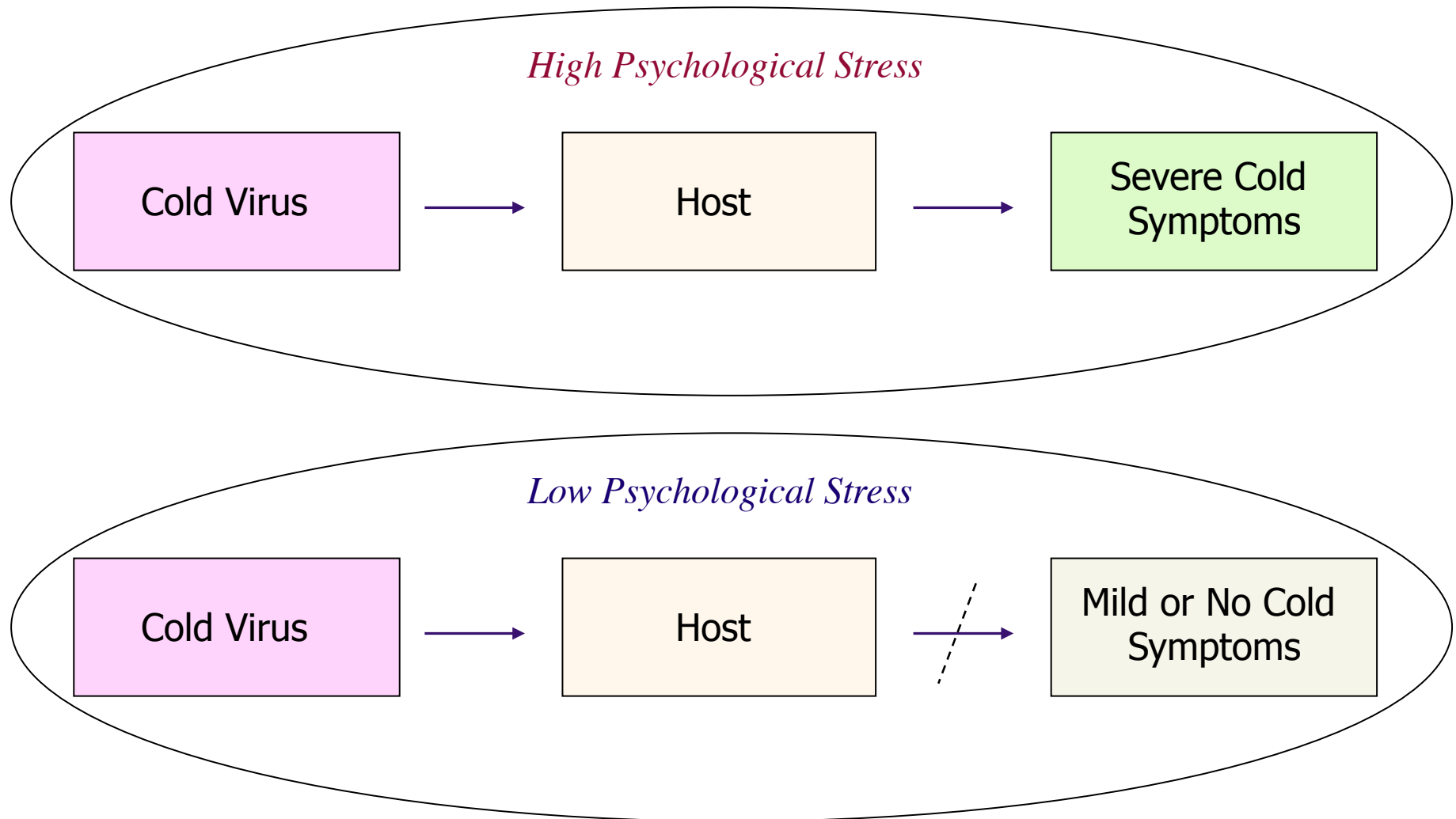
- Biomedical Model
- Biopsychosocial Model
- Social Ecological Model

Germ Theory of Infectious Disease



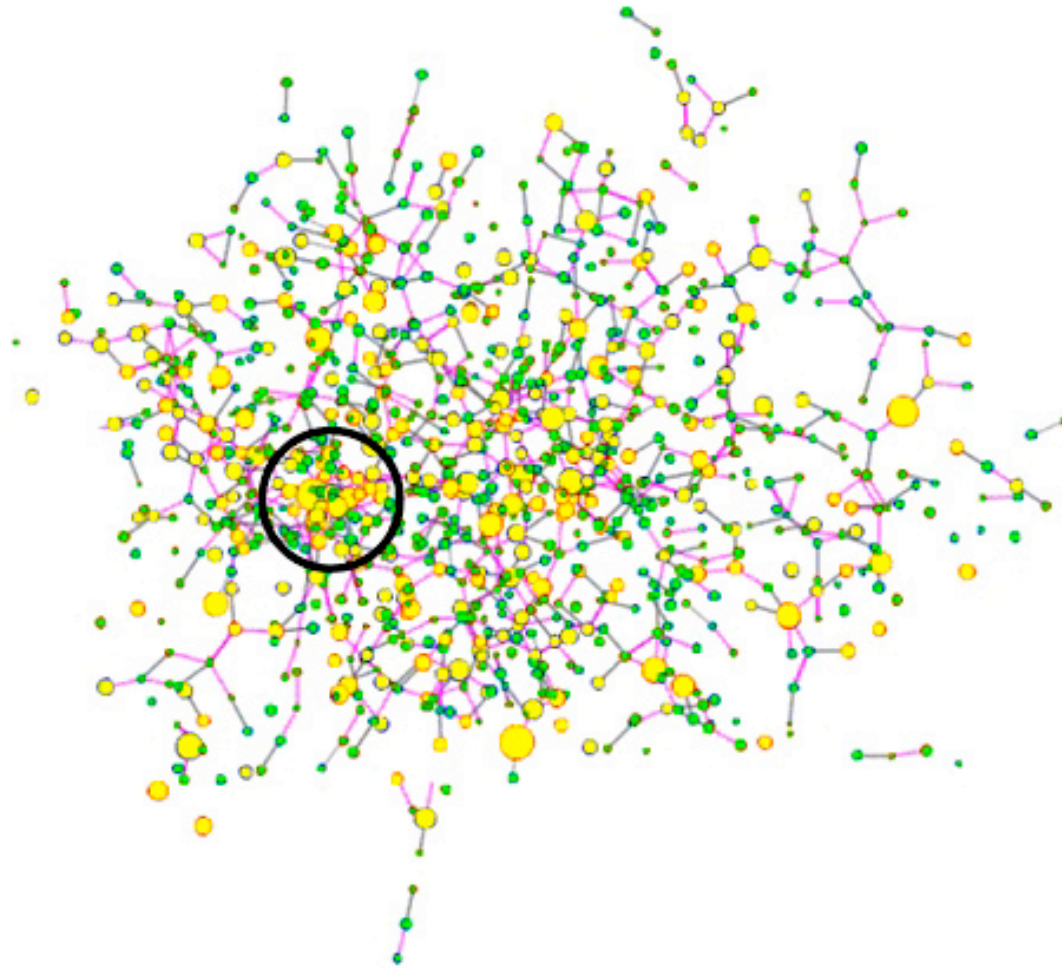
(1878)

Biopsychosocial Model of Susceptibility to Colds



(Cohen, Tyrell, & Smith, 1991)

The Social Contagion of Obesity



(Christakis & Fowler, 2007)

The Ecology of Obesity



Rapid Adoption of Westernized Fast Food in China



Communities Characterized by Urban Sprawl Have Higher Rates of Obesity in the Population



(Frumkin, Frank, & Jackson, 2004)

Physical Environment and Cultural Influences on Health – Bike and Rail Oriented Cities in Europe

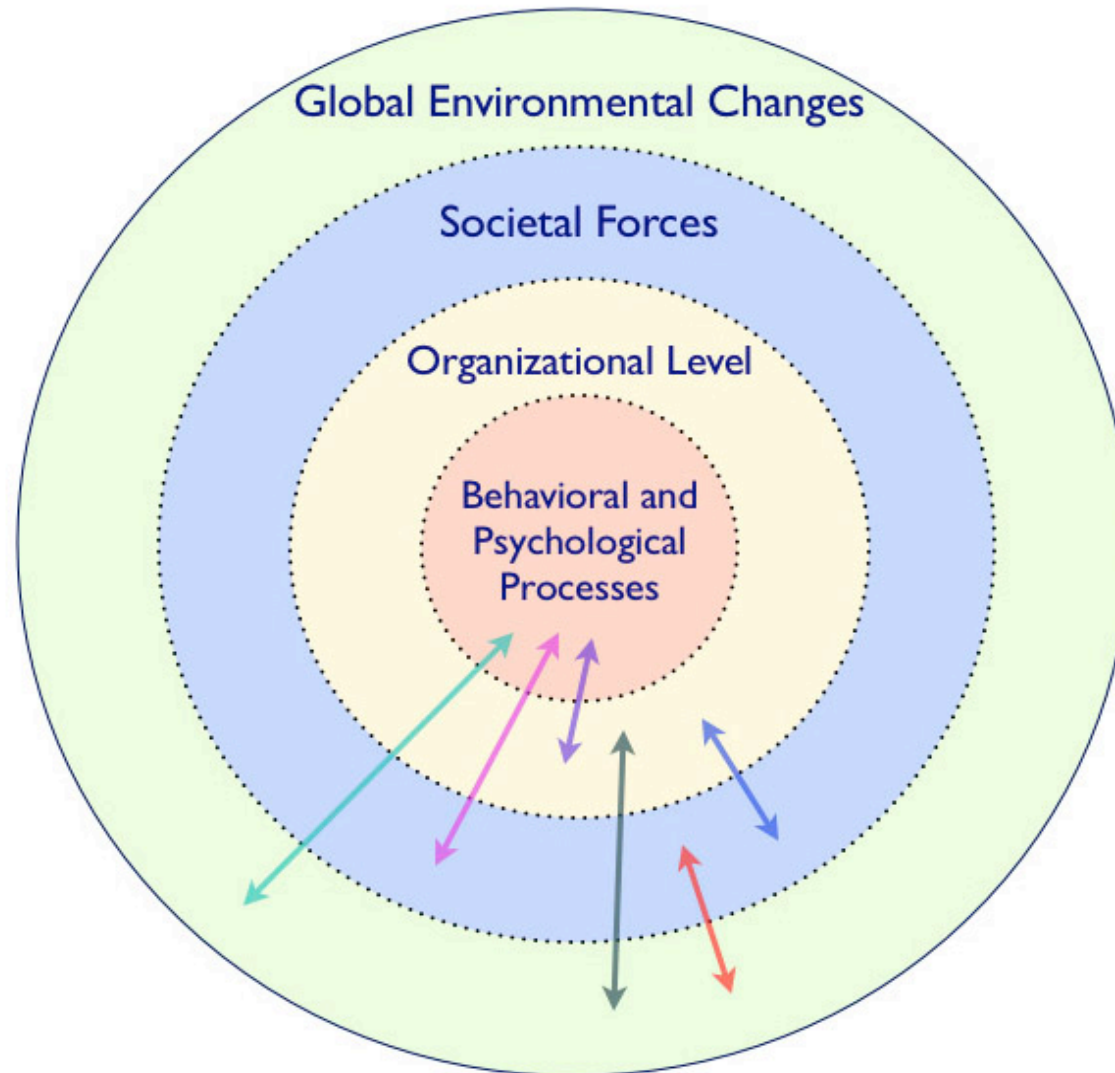


Core Principles of Social Ecology

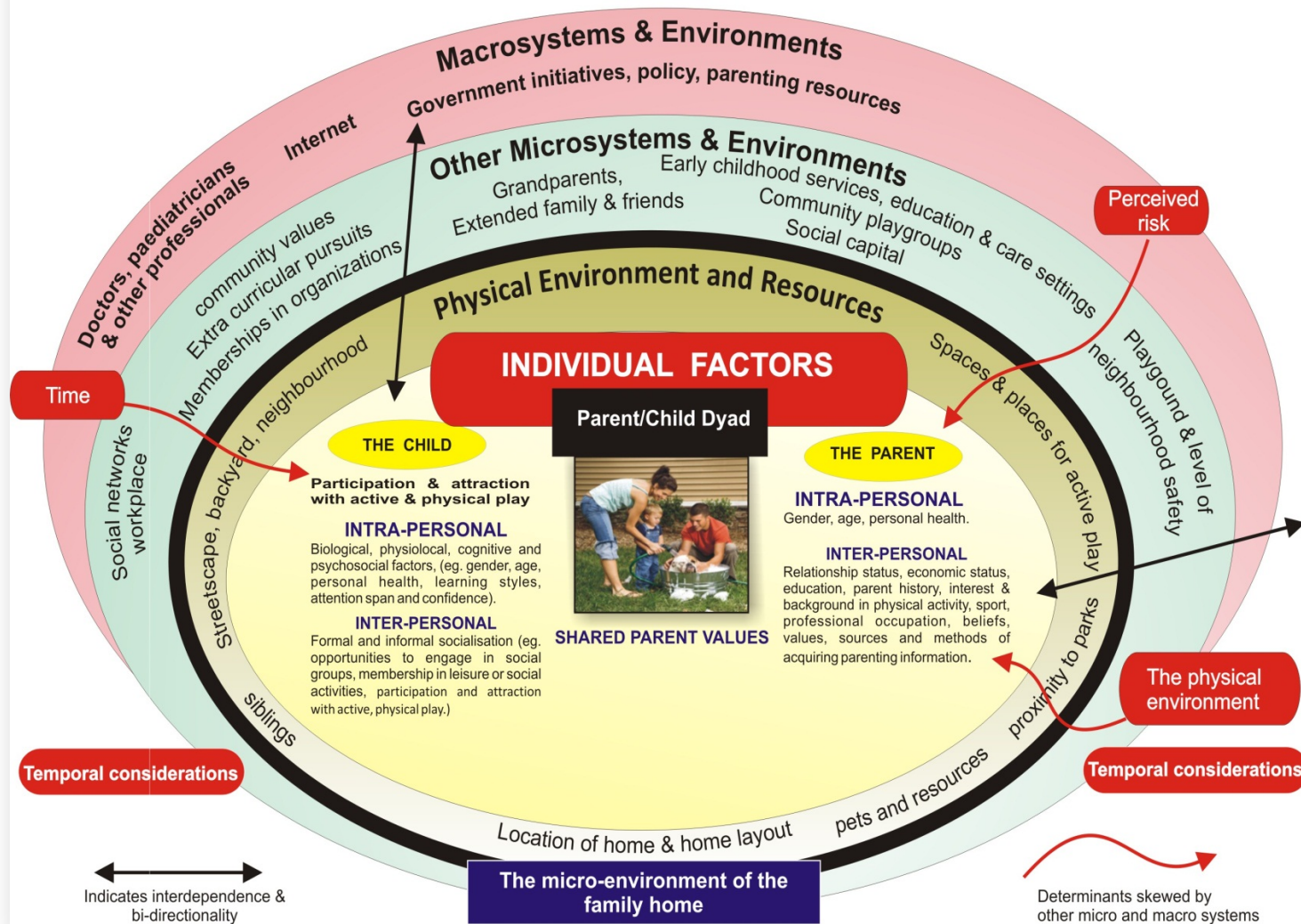
1. Multidimensional structure of human environments—physical & social, natural & built features; objective-material as well as perceived-symbolic (or semiotic) qualities
2. Cross-disciplinary, multi-level, contextual analyses of people-environment relationships spanning proximal and distal scales (from narrow to broad spatial, sociocultural, and temporal scope)
3. Systems principles--especially feedback loops, interdependence of system elements, anticipating unintended side effects of public policies and environmental interventions
4. Action research perspective--Translation of theory and research findings into community interventions and public policies

The Ecology of Health and Health Behavior

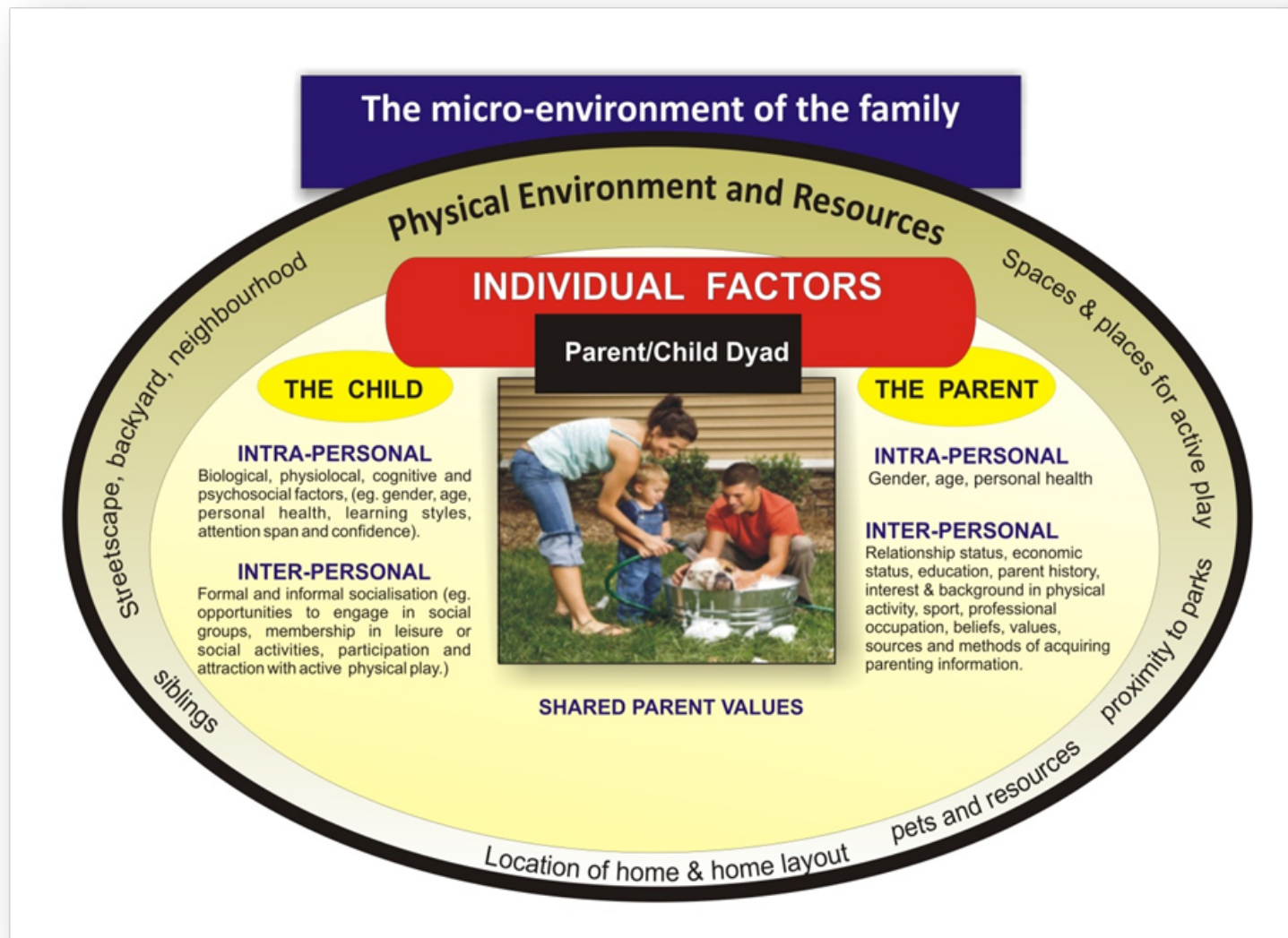
Understanding Mutual Influences Among Psychological, Organizational, Societal, and Global Environmental Processes



The PMEM Model - Parental and Micro-Environmental Model



(Brown, 2012)



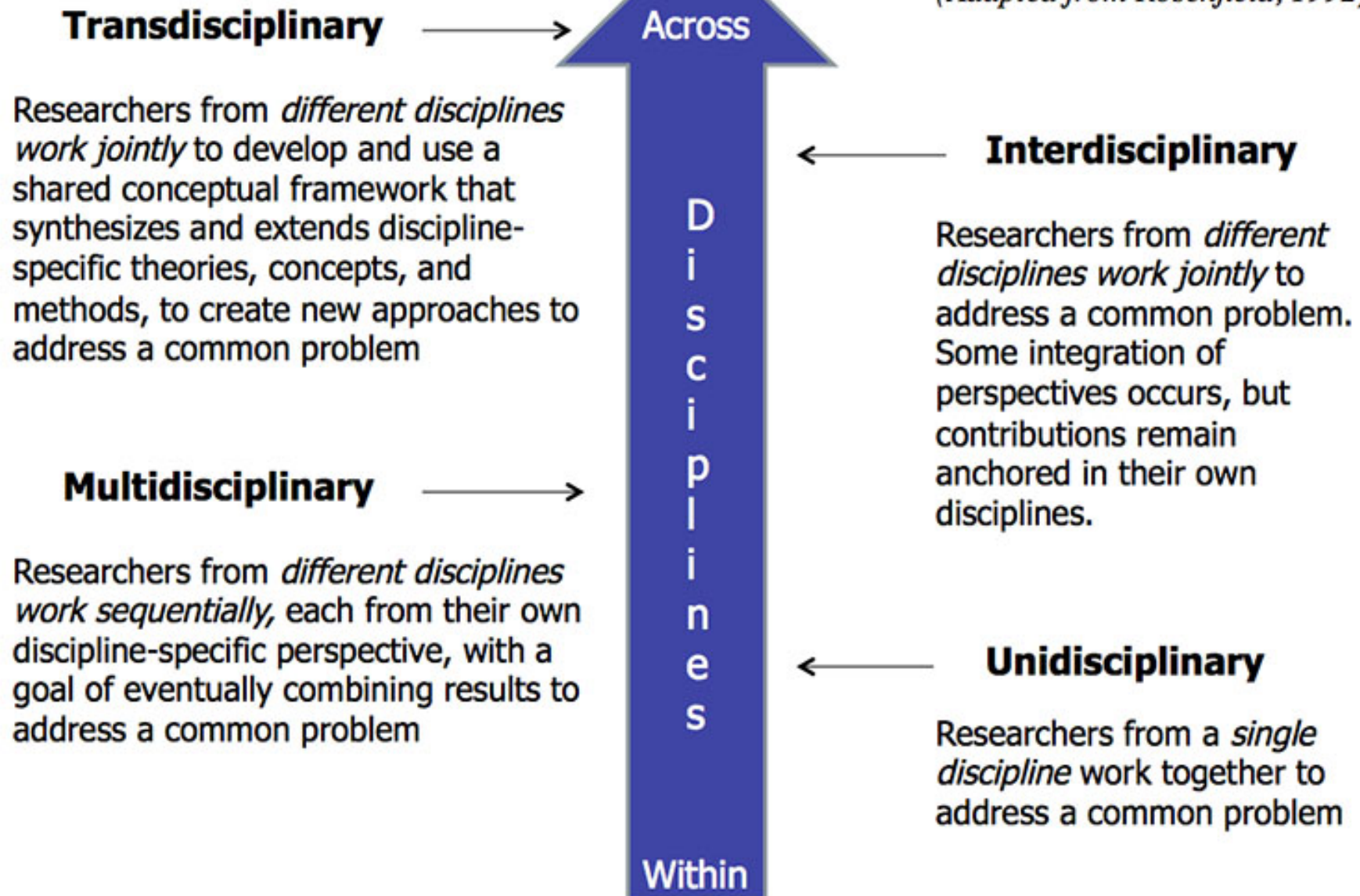
Components 1 & 2 of the PMEM model outlining examples of factors sitting within the micro-environment of the family home (Brown, 2012)

Cross-Disciplinary Research

...a process through which the perspectives of two or more scientific or professional fields are combined to achieve a more complete understanding of a particular phenomenon

A Continuum of Cross-Disciplinary Integration

(Adapted from Rosenfield, 1992)



Translational Research and Practice

A sub-type of transdisciplinarity in which at least one academic discipline and one non-academic epistemology are integrated for purposes of creating novel approaches to analyzing and resolving complex community and societal problems; sometimes referred to as 'transdisciplinary action research'

Academic and Non-Academic Perspectives

Scientists/Academicians— *discipline-centric and cross-disciplinary knowledge derived from theoretical analyses and empirical research*

Lay Citizens and Community Stakeholder Groups— *based on personal lifestyles, shared interests, subjective experiences, families, and other community groups*

Business Leaders and Other Professional Groups— *rooted in the experiences of businesses and financial institutions, and professional training in practice-oriented fields (e.g., accounting, finance, corporate law)*

Government Decision-Makers— *rooted in institutional governance, political realities, market dynamics, policy and planning strategies*

Cervical Cancer Prevention

The Importance of Integrating Biomedical Research With Behavioral and Social Science

 Department of Health and Human Services
Centers for Disease Control and Prevention

CDC en Español

Search CDC

Sexually Transmitted Diseases

[Sexually Transmitted Diseases](#) > [Human Papillomavirus \(HPV\) Infection](#) > HPV Vaccine Information For Young Women

HPV Vaccine Information For Young Women

There is now a vaccine that prevents the types of genital human papillomavirus (HPV) that cause most cases of cervical cancer and genital warts. The vaccine, Gardasil®, is given in three shots over six-months. The vaccine is routinely recommended for 11 and 12 year old girls. It is also recommended for girls and women age 13 through 26 who have not yet been vaccinated or completed the vaccine series.

- [Why the HPV vaccine is important](#)
- [Who should get the HPV vaccine](#)
- [Effectiveness of the HPV vaccine](#)
- [Safety of the HPV vaccine](#)
- [Cost and paying for the HPV vaccine](#)
- [What vaccinated girls/women need to know](#)
- [Other ways to prevent HPV and Cervical Cancer](#)



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HEALTH

Why Are HPV Vaccine Rates So Low?

It's been hailed as one of the most effective ways to prevent cervical cancer, but millions of young women have yet to get immunized.

By [Karen Springen](#) | Newsweek Web Exclusive
Feb 25, 2008 | Updated: 6:02 p.m. ET Feb 25, 2008

Scientific and Social Validity

Scientific

*Methodological
rigor and
theoretical
adequacy of the
research or
intervention*

Social

*Societal value
and practical
significance of
the research or
intervention*

(Geller, 1991)