

Environmental Gerontology: From Theory to Practice

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Objectives for attendees:

- Develop an understanding of the theoretical underpinnings of environmental gerontology
 - Press-competence
 - Belonging and Agency
- Be able to describe some concrete examples of practical applications informed by environmental gerontology
- Come away with ideas for applying concepts and examples in own profession

Environmental Gerontology

- Field that aspires to “understand, explain, and optimize the interaction between older adults and their environment” (Schwarz, 2012, para. 1)
- Concerned with
 - varieties of housing arrangements for older adults;
 - nature & effect of home modifications;
 - range of facilities for institutional care;
 - role of neighborhoods & community settings; rural, urban socio-physical contexts (Wahl, 2001; Wahl & Weisman, 2003; Schwarz, 2012)

Environmental Gerontology

- **Not a normal science.** (Schwarz, 2012 – “Environmental Gerontology: What now?”)
- Multiple perspectives, levels of analyses, interpretations of “environment”
- Lacks a paradigm; many theoretical approaches, but no unifying element for organizing EG scientific work
- Like other social sciences, EG produces **contextual knowledge** about how to understand & act in contextualized settings based on values, interests (Flyvbjerg, 2001; (Schwarz, 2012)

Environmental Gerontology Theories

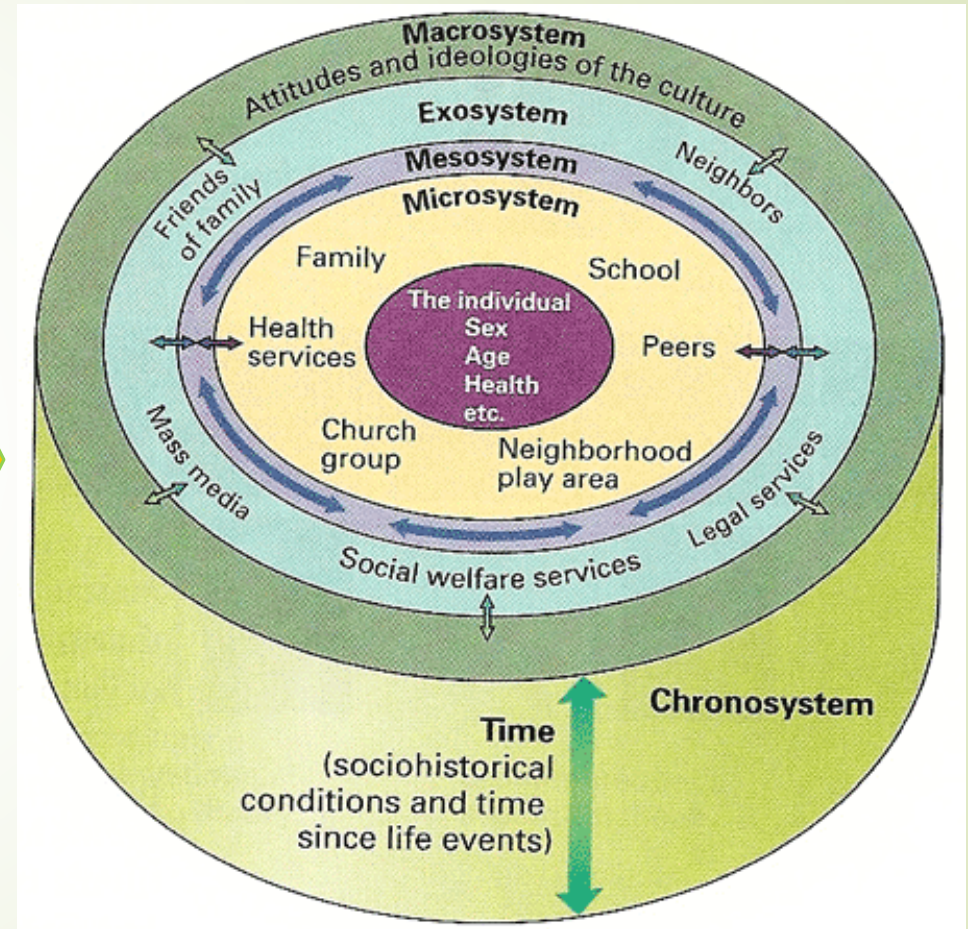
- ▶ “No theoretical approach is sufficiently coherent, precise, and established as to constitute paradigm of abstract concepts and laws as well as verified research findings” (Turner, 2001, p. 29)
- ▶ Psychologist Kurt Lewin (1936)
 - **B = f (P, E)** Behavior equals a function of both the person & the environment
 - “There is nothing so practical as a good theory.”
(Marrow, 1969, p. viii); forefather of **action research**

Environmental Gerontology Theories

Incorporate elements of **biopsychosocial model**

Reflect **life-cycle factors**

Brofenbrenner's Ecological model





M. Powell Lawton (1923–2001)

- Behavioral psychologist
- Ph.D. in clinical psychology at Columbia University in 1952, named chief psychologist at the Veterans Administration Hospital in Providence, R.I
- Examined questions of quality of life, how valuation of life relates to willingness to live
- Among the first to recognize a need for living spaces designed to accommodate older adults, especially those with Alzheimer's disease

Competence and environmental press

- ▶ Lawton and Nahemow developed the **Press-Competence model** in early 1970s
- ▶ Has been useful to explain behaviors such as adherence to medication regimens, adaptations to changing housing needs, and exerting control over our lives
- ▶ **Competence:** the upper limit of a person's ability to function in five domains:
 1. Physical health
 2. Sensory-perceptual skills
 3. Motor skills
 4. Cognitive skills
 5. Ego strength

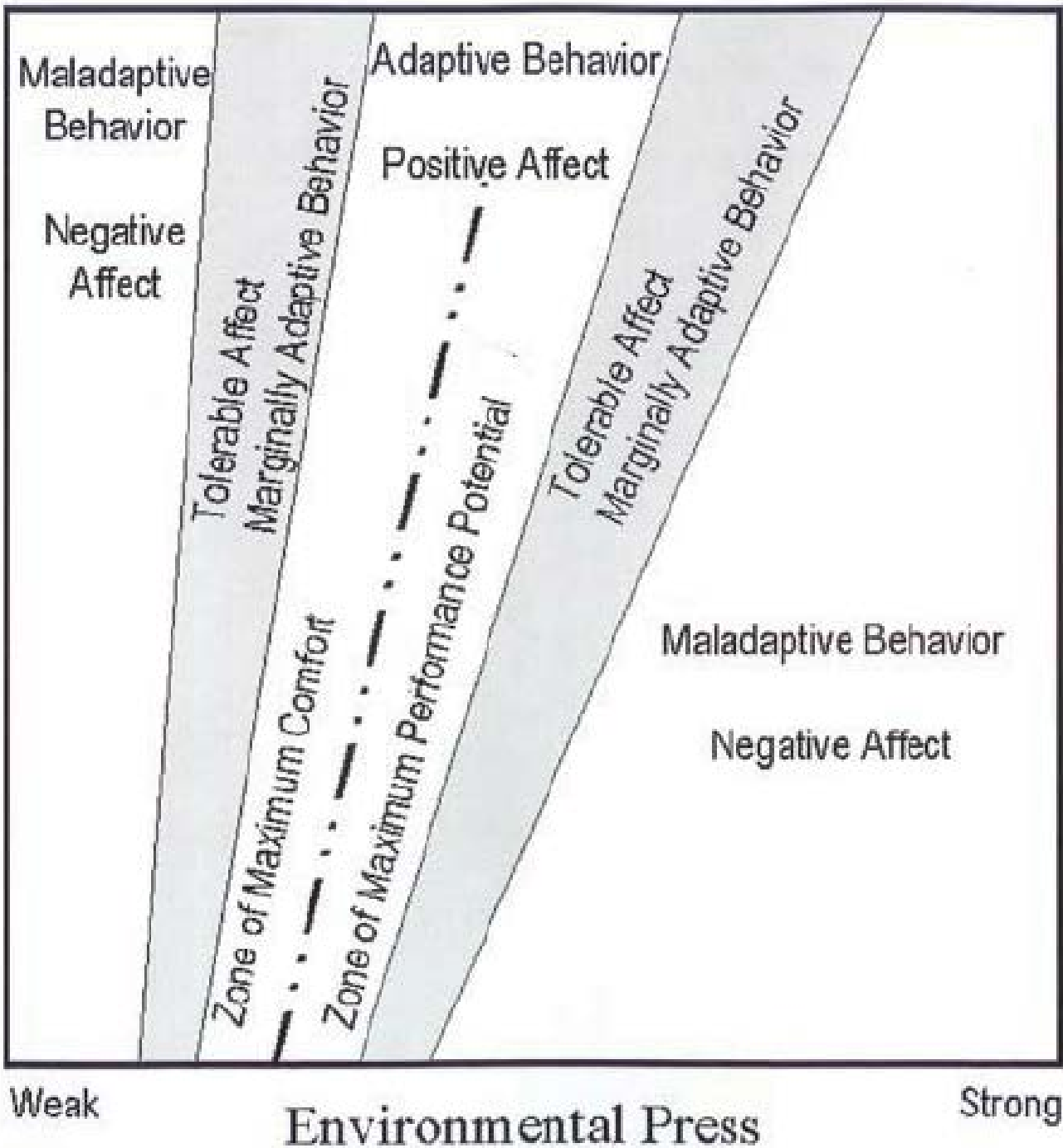




High

Individual Competence

Low



The Competence and Environmental Press Model

Environmental Press: the physical, interpersonal, or social demands that environments put on people

A person with HIGH COMPETENCE will have a larger range of maximum performance potential, at HIGH ENVIRONMENTAL PRESS.



Belonging and agency

- Frank Oswald (Goethe U, Frankfurt) & Hans-Werner Wahl (U of Heidelberg)
- Belonging:
 - Reflects subjective environmental experience, interpretation of places, meaningfulness, emotional bonding, place attachment
- Agency:
 - Reflects perceived controllability, use, adaptation, creation, sustaining of place

Practical implications

- Cognitive decline associated with dementia can decrease the cognitive threshold of individual to process environmental stimulation (*P-E fit*)
- Emergence of **care units designed specifically for people with dementia**
- Instruments used in dementia care facilities: Therapeutic Environmental Screening Survey (TESS-NH); [Dementia Care Mapping](#) (DCM; Chaudhury, Cooke, & Frazee (2013) addition of physical environment evaluation)

Practical implications

- Implications for aging in place
- E.g.: *"It is possible that in the future, older people will not only use **robot care** to support and compensate for lost competencies (**agency**) but may also feel emotionally attached to their robotic animal or enjoy virtual reality, new means of experiencing environmental richness in the context of pronounced disability (**belonging**)."* (Wahl, Iwarsson, & Oswald, 2012, p. 310)



Practical implications

► Age-Friendly Communities

“By focusing on improving their physical, social, economic, and service environments, communities can take advantage of the resource that older adults represent and shape places that work not only for residents who are older now but also for residents across the life course. Changes that benefit older adults generally offer benefits to younger people, as well.”

-(The Case for Age-Friendly Communities, 2016, p. 3)

Six guiding principles for application

1. Understanding Diversity
 - Chronologically a 40-year span
 - There is no “one size fits all”

(Rowles & Bernard, 2013)



Six guiding principles

2. Research-Informed Practice & Practice-Aware Research



(Rowles & Bernard, 2013)



Six guiding principles

3. Person-Centered Practice

- Counter the tendency to construct older people in negative, dysfunctional ways; avoid labels such as 'frail,' 'at risk,' 'dependent,' 'demented' "
- Personhood should be **central to care**
- Builds on strengths/resources, values what older people value, recognizes subjectivity of lived experiences (biographical context)
- *"There are many of us who do not want to be maintained. We want to belong, not only to each other, with whom we may have only one common denominator, age, but to society. We want to be just like everyone else."* -75-YO (p. 226)



Six guiding principles

4. Inclusive Design

- People of different generations appear to spend less time together → generational estrangement
- *“ While we are not suggesting that environments should never be designed for a specialized population, **age inclusiveness should become an accepted criterion** in assessing environmental design options and the creation of both private and public spaces.” (p. 294)*



Six guiding principles

5. Critical Environmental Gerontology

- Value-committed approach concerned with understanding how aging and old age is **socially constructed**; how can we challenge and change experiences for the better
- What is meaningful about “age” as a sociological category?
- Interplay of structures, history, context and experience (including class, race, gender)

(Rowles & Bernard, 2013)



Six guiding principles

6. Interdisciplinary, Interagency, & Interprofessional Collaboration

- Gerontology is often in social work, psychology, health, nursing; not often a stand-alone field, opportunities to work w/ architects, designers, planners



Four overarching areas of application

1. Physical Alterations & Preservation of Environments

- Perhaps most obvious & well-understood
- Benches, walking paths, curbs, signals
- Interior home modifications to support aging-in-place



(Rowles & Bernard, 2013)



Four overarching areas of application

2. Communication & Information

- Pre-planning focus groups with stakeholders/developers & potential residents
- Materials/handbooks for people changing environments
- User-friendly research-based “design principles” for professionals



Four overarching areas of application

3. Monitoring & Evaluation

- Tools to watch/record behaviors → improve quality of life; from observing public spaces to bed “bug” sensors
- From improved access routes, addition of features in public areas → rearranging furniture in home



Four overarching areas of application

4. Education, Training, & Learning

- Staff training, checkups, and post-occupancy evals in facilities
- Community workshops, seminars, focus groups (e.g., sessions instilling appreciation of possessions & artifacts to create “home”)
- Peer support, one-on-one mentoring
- Beyond the classroom – take knowledge/ research into professions + informal interactions!

(Rowles & Bernard, 2013)



Other ideas?

Questions?





Thank you!

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