THE ECOLOGY OF HUMAN DEVELOPMENT

FEM 3001
Ecological Background

- We do not live in isolation – we interact
- Environment: everything outside the system that we (the organism) live in
- Human beings = biological organism + social organism that interact and have transactions with(in) the environment
• Many proponents of ecological concepts.
• Aristotle and Plato
• The word “ecology” was introduced by Ernest Haeckel (1969) – German zoologist
  • Originated from Greek term – *Oikus* (home/family)
• Human ecology – the study of individual in the context of family, household and environment.
• Individual development - interaction between the environment and heredity.
A Chemist, Ellen Swallow Richards proposed a Scientific field of study to examine the influence of home environment on the family.

Ellen studied air and water quality, sanitation, food & nutrition.
Basic concepts from the General Systems theory are applied

Holistic perspective = holism, looking at living nature as interacting wholes (the whole is greater than the sum of the parts)

Every system has 4 elements:
1. Objects
2. Attributes
3. Relationships
4. Environments
- **Objects** = parts of the system; what the system is made of (in a family – each member = object); basic element of the system
- **Attributes** = qualities/properties of the system & its members; indicate characteristics; uniqueness
- **Relationships** = connection between / among the elements of the system (between object-environment)
  - Systemic thinking = thinking relationally; observe happenings in surrounding systems/environment as an interaction occurs
- **Environment** = anything that surrounds; can affect systems ➔ understanding person-in context
What is ECOSYSTEM? ..

- A type of system .. Ecological system
- Made up of living organism (O) with their environments (E)
- originates from ecology: a science that investigate & describe reciprocal relationships between O & E)
**Basis:** a survival unit never consist of O or species in a static environment; but rather, that it is an ecosystem with all O in reciprocal relationships with each other & with E

- Human behavior is influenced by the environment and vice versa
- Even though the environment changes due to technology, human beings need to impose control on life & environment to ascertain quality of life
- Ecosystem seek a steady / stable / balanced state of existence ➔ HOMEOSTASIS
- Organism adapts to reach homeostasis
Bases: Human development is studied from the context of person-in-environment

The principle: all growth & development occur in the context of relationships

It’s an inter-disciplinary concept
Human Ecological System Perspective

System Theory

- Objects +
- Attributes +
- Relationships +
- Environment +

Ecological Theory

- Organism +
- Environment +
- Interaction +

Human Ecology
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To integrate & link various human & family issues ➔ holistic & in a comprehensive manner to ensure a global plan of action

Human ecology = a field of study that considers individuals & families within their environment & the relationships between them
6 assumptions for the human ecological framework

1. Human-beings are not passive receivers of information & inputs
2. Systems are dynamic ➔ always changing
3. Individuals & social systems have the capacity to change (they also wish to change)
4. Changing one element of a system will cause change(s) to other parts
5. Systems rely interdependently on one another to operate
6. All systems have boundaries
- **Beatrice Paolucci** (Michigan State University) employed the home-economics approach.
- Suggested that family is a social system that depend on:
  - The natural environment for physical maintenance
  - Social environment for human values; meaning and quality of life
Margaret Buboltz & Susan Sontag (Michigan State University) continue Paolucci’s work

Proposed 3 environments that surround human beings:

- Natural - biophysical
- Socio-cultural
- Technology-human constructed
Physical, biological, social, economic, political, esthetics & structure surroundings

They are contexts for human behavioral & growth/development

Can be classified according to resources within them
Mother-nature resources

Water, earth, snow, time, plants, animals, fossil, minerals

Can be beneficial for human consumptions
Social institution - kinship, religion, politic, economy, legal, recreation or symbolic group

Determines civilization & cultural system
Technology – Human Constructed Environment

- Buildings, bridge, hydro-electric, houses, highway
- Built using materials from the natural environment
- Science and technology advancement helps to improve quality of life;
  - abuse of it may destroy life
Family Ecosystem Model [Bubolz & Sontag; 1990]
Urie Bronfenbrenner (Cornell University) focused on contextual aspects of human development.

He introduced 5 environmental systems: micro, meso, exo, macro & chrono.
Classification based on size of the environment:
- MICRO ➔ small
- MACRO ➔ BIG

Bronfenbrenner (1979): the ecology of human development based upon the relationships between human beings & context where they interact or make transactions (exchange resources).

The 5 systems are embedded within each other; the nearest environment is the environment where the individual resides & develops.
MICROSYSTEM

✓ The nearest environment to the individuals
✓ A pattern of activities, roles & interpersonal relations experienced by the developing person in a given setting with particular physical & material characteristics
✓ Eg: Home environment & classroom are micro environments for primary school children
MESOSYSTEM

- Comprises the interrelations among 2 or more settings in which the developing person actively participates

- Example:
  - Child: relations between home-school & neighborhood;
  - Adults: family-work-social life

- It is a system for the micro system
Refers to ≥ 1 settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by what happens in the setting containing the developing person.

Eg: exosystem of a child might include the parent’s place of work, a school attended by his older siblings, activities of the neighborhood etc.
Abstract in nature: refers to consistencies, in the form & content of lower order system (micro, meso, exo) that exist, or could exist, at the level of subculture or the culture as a whole along with any belief systems or ideology underlying such consistencies.

eg: socio-cultural / customs; legal systems, religion, education, defense system.

- space is perceived differently across cultures – what determined the differences? Law? Religion? Custom?
CHRONOSYSTEM

- Refers to patterns of events & transitions that take place in individual’s environment throughout his/her life
- The element of TIME is important in this system
CHRONOSYSTEM
Pattern of events & changes in structure according to time

MICROSYSTEM
Family
Friends
Community
Work place

MESOSYSTEM
School

EXOSYSTEM
Value system

MACROSYSTEM
Belief system

Pattern of behaviour
The importance of the ecological perspective in understanding human development:

- **It takes the holistic approach (considers multiple factors regarding person – in – context).** Focuses on wholeness.
- **Any phenomenon is seen from multiple perspectives > aiming to get the obtain high quality of life / environment**
- **Allows for an integrated plan of action – balanced & holistic; lend to improve Quality of life (individual, family, community...)**
- Environments do not DETERMINE human behavior; but they can influence them through: limiting / blocking / allowing / facilitating / opening for opportunities & possibilities

- Families do not exist in isolation from the other environments, rather, they have a degree of control and freedom on their interactions / transactions with the environment & acquisition of resources
Decisions & actions that are taken by individual/families will give an impact on the community, culture, other environments ... the WORLD.

The world’s ecological well-being depends on the decisions & actions by the nation... down to the individual & families

Decisions made at macro level or even at the WOLRD’s platform, will directly or indirectly impacting the individual & families
Basic principles in ecological model (Conrad & Novick, 1996)

- Human development is studied through the person-in-environment perspective
- Multiple & different environments experienced by individuals influenced the growth & development of individuals
- Every environment has its risks & protective factors
- The interactions between individuals & environment are two-way / reciprocal. It creates a complex feedback system
- Individual & family will always face changes & growth. Stress, coping & adaptation are normal developmental experiences
The general human/family ecological focused on the near environment (people, materials) which provide physical context & prime base for personal & familial activities

The community system (neighborhood, market, schools, mosques/church/temple are included

The macro (bigger) environments may also influence individual & family
Family ecosystem receives INPUT from the environment, transform in into OUTPUT back to the environment.

**Family inputs:** matter/energy (physical substance – food, clothing, housing, support system, services & information – knowledge, values, policies, law, custom & belief system)

Inputs are obtained through multiple methods; help families to function accordingly
Human development occurs within the family context through family processes & activities

These processes & activities are needed and influenced by the reciprocal interactions with & within the natural-physical; human constructed & socio-cultural environments

The outcome ➔ QUALITY OF LIFE & ENVIRONMENT

Human Q of life: To what extend human needs, values & goals are met & how are they obtained

Q of environment = safety, health, coping strategy, adequacy, justice... in providing natural resources, economic, social needs & support.
FAMILIES WITH VARIOUS CHARACTERISTICS
Structure  Ethnic Origin  Socio-economic status
WITH INDIVIDUAL & FAMILY ATTRIBUTES
Needs  Values  Goals  Resources  Artifacts
INTERACTIONS WITH & WITHIN MULTIPLE ENVIRONMENTS
Natural-biological-physical  Human constructed  Socio-cultural

TRANSFORM
Energy  Information
INVOLVED IN CORE PROCESSES
Adaptation
THROUGH ACTIVITIES / PROCESSES
Perceiving  Decision making  Sustainability
Organization  Management  Human development
Communication  Technology advancement  Design

OUTCOME
Q of Life & Q of Environment
Product of the realisations of values & goals
Human well-being
Environmental Sustainability Practices

Figure: Interrelationships between concepts in Family Ecology theory
The ecological perspective encourages the followings criteria in order to understand human beings:

1. An integrated thinking
2. Creative thinking
3. A comprehensive focus of dynamic
4. Systemic understanding
5. Ethical reasoning
5. Variability
5. Practical action
5. Self understanding