General Systems Theory

SSS571 – Human Behavior and the Social Environment
Class #8
Historical & Conceptual Underpinnings
What is loosely called “Systems Theory” today has its intellectual roots in both sociology and biology.

All focus on the interrelatedness of people and their environments as well as their interactions with and adaptations to each other.

Many streams of theoretical development over time, including developments in social work.
Theoretical Streams of Systems Theory

- Systems Theory
  - Structural-Functionalism
  - Ecological Perspective
  - Chaos Theory
  - Family Systems Theory
  - Dynamic Systems Theory
  - Eco-Feminism
  - Deep Ecology
Key Early Theorists: Sociology

- Explanations of both types of societies and their structure and functions:
  - Ferdinand Tönnies (1855-1936) - *gemeinschaft & gesellschaf*
  - Émile Durkheim (1855-1936) – how societies can maintain integrity and coherence in the absence of shared religion or ethnic backgrounds
  - Max Weber (1864-1920) – actions of individuals in relation to social institutions, including religion and economics
Explanations of how processes of biological systems can be applied to human systems

  - Major contribution was his “theory of open systems” with key concepts still used today
  - Human systems as holistic and organic
  - Influenced developments in sociology, anthropology, economics, political science, psychology, and social work
GST introduced to social workers in late 1950s by Gordon Hearn.

Became more widely adopted after Carel Germain wrote it as part of her “ecological perspective” in 1973; later extended in The Life Model of Social Work Practice, co-authored with Alex Gitterman in 1980.

This perspective emphasized the “goodness of fit” between people and their environments and the “fluidity” of social functioning.
Systems theory has been applied to biological, psychological, social, and spiritual dimensions of human behavior.

Has also been applied at all levels: individuals, groups, families, organizations, institutions, communities, and eco-systems.
Major Perspectives ala Hutchison?

- Clearly grounded in the “Systems” Perspective
- Also reflects elements of:
  - Social Behavioral Perspective
  - Social Constructionist Perspective
  - Rational Choice Perspective
  - Developmental Perspective
  - Humanist Perspective
  - Conflict Perspective
  - Psychodynamic Perspective
A system is a complex whole with a set of components interacting with each other, which has a boundary with the capacity to filter both the kind and rate of flow of inputs and outputs to and from the system.

**Major Premises of Systems Theory:**

- Changes in any part of a system affect the whole system and parts of a system are affected by changes in the system as a whole.

- A system achieves its goals by taking in energy/information/resources, using or processing these elements, then expelling energy/information/products that are different from the original inputs.
Every system is a holon – which means that every system is simultaneously:

- a whole with its own distinctive qualities,
- a part of larger systems,
- and a container of smaller systems.
**Key Principles & Concepts con’t.**

- **Focal System:** The system that is the focus or unit of attention at any given point in time.

- **Sub-system:** A system that is part of the focal system and is smaller and internal to the focal system.

- **Supra-system:** A system that is external to the focal system and bigger than the focal system.
What is the focal system?
What are the sub-systems?
What are the supra-systems?
What is the focal system?
What are the sub-systems?
What are the supra-systems?
**Key Principles & Concepts con’t.**

- **Inputs:** Energy/information/resources introduced and absorbed by the system

- **Throughputs:** The transformation of energy/information/resources to be used by the focal system to achieve its goal

- **Outputs:** Energy/information/products discharged from the system
**Key Principles & Concepts con’t.**

**Boundary:**

- the region separating one system for another
- defines what is inside or outside the system
- regulates the flow of energy/information/resources (inputs) entering and leaving the system (outputs)
- transfers energy/information/resources from focal system to supra- or sub-systems
Key Principles & Concepts con’t.

- **Open system**: A system that allows cross-boundary exchange (“permeable”)

- **Closed system**: A system that does not allow exchange across boundaries (“entropy”)

- When exchanges of energy/information/resources promote growth and transformation, referred to as “negative entropy” or “synergy.”
Open dynamic systems: Systems that are both self-maintaining and self-transforming.
- Morphostasis (form maintaining)
- Morphogenensis (form changing)

Together, morphostasis and morphogenensis keep systems in a process of constant flow and change that is called a “dynamic steady state” or homeokinesis.
**Key Principles & Concepts con’t.**

- **Feedback:** Information that a supra-system gives to the system about its output.
  - **Positive Feedback:**
    - Communicates to the system to accelerate actions
    - Signals the system that it is open and will allow more inputs
  - **Negative Feedback:**
    - Communicates to the system to decelerate actions
    - Signals the system that it is closed and to cut off or reduce inputs

- **Equifinality:** “Same end from different beginnings”
Major Critiques of Theory

- Diversity not addressed in earlier forms of systems theory (structural-functionalist); better addressed in dynamic systems theory, deep ecology, and eco-feminism, which highlight that diversity is natural, inevitable, and desirable.

- Cultural, economic, and structural conditions that produce inequality and oppression were largely ignored or minimized in earlier developments, particularly in earlier structural-functionalism. Power issues were seen primarily as a matter of “transaction” in early versions of the ecological perspective (“blaming the victim”) – better handled in later versions.

- Criticized for methodological problems and limitations (e.g., conceptual clarity, measurement) in empirical evidence – better at description and explanation of behavior than prediction.
Contemporary Development:
Family Emotional Systems Theory
&
Structural Family Systems Theory
Family theory/family therapy movement began after WWII focusing on returning soldiers readjustment to family life.

Also due to observations that persons with mental health issues failed to respond, or regressed, when they returned to their home environments after inpatient treatment.

Shift from attention on intrapsychic forces within “identified patient” to focus on dynamics of “dysfunctional family systems.”

Also reaction to strict behavioral theories. Bertalanffy critiqued Skinner, saying that his approach turned people into “Skinnerian rats” (Bertalanffy, 1948, p. 206).
Families are systems of interconnected and interdependent individuals, none of whom can be understood in isolation from the system.

- The whole is greater than the sum of its parts (nonsummativity).
- Understanding is only possible by viewing the whole.
- Rejects linear causality (A causes B) for circular causality (A influences B, which in turn influences A, with both influencing C, and so on).
- Systems exist in their environment.
Family Emotional Systems Theory

- **Murray Bowen** (1913-1990)
- Born in a small town in Tennessee; eldest of 5 children.
- Trained as a surgeon, switched to psychiatry after serving in WWII.
- Trained in psychoanalysis at the Menninger Foundation in Topeka where he studied patients with schizophrenia. Also worked at NIMH where he was involved with an intensive study of interventions with schizophrenia.
- Professor of psychiatry at Georgetown University Medical Center and founded the Georgetown Family Center in 1975 and maintained a private practice in Chevy Chase, MD.
Key Principles & Concepts

**Major Premise of Family Emotional Systems Theory**

- The key generator of anxiety in families is the perception of either too much closeness or too much distance in a relationship.

- Major goal is to reduce chronic anxiety by:
  - Facilitating awareness of how the emotional system functions, and
  - Increasing levels of differentiation, where the focus is on making changes for the self rather than on trying to change others.
8 Interlocking Concepts:

1. **Emotional Fusion:** When individual choices are set aside in the service of achieving harmony within the system. Expressed by:
   a. a sense of intense responsibility for another's reactions, or
   b. by emotional 'cutoff' from the tension within a relationship

2. **Differentiation of Self:** Capacity of an individual to function autonomously by making self-directed choices, while remaining emotionally connected to significant relationship system.

3. **Triangle:** A three-person relationship system that is the smallest stable relationship unit.

4. **Nuclear Family Emotional System:** The impact of undifferentiation on the emotional functioning of persons in a nuclear family system.
   a. Couple conflict
   b. Symptoms in a spouse
   c. Symptoms in a child
5. **Family Projection Process:** The transmission of emotional problems from parent(s) to a child or children.

6. **Multigenerational Transmission Process:** The transmission of patterns, themes, and positions (roles) in a triangle are passed down from generation to generation.

7. **Emotional Cutoff:** The act of reducing or cutting off emotional contact with family as a way managing unresolved emotional issues.

8. **Sibling Position:** The impact of sibling position on development and behavior.
Intervention Process For Family Emotional Systems Theory
Connection between Theory & Practice

- **Assumptions:** Patterns develop in families in order to defuse anxiety, which create problems for individuals in the system.

- **Theory:** Individual’s level of differentiated functioning is based in family patterns, which are multigenerational in nature; awareness of these patterns can help change current family dynamics and individual behavior.

- **Model:** Reduce anxiety in family system through increasing awareness of intergenerational patterns and work on differentiation of self within both nuclear family and family-of-origin.

- **Assessment:** Involves assessing family dynamics and impacts on family members (emotional fusion, levels of differentiation, triangles, nuclear family family emotional system, family projection processes, multigenerational transmission processes, emotional cutoffs, sibling positions).

- **Goals:** Increase awareness of family system patterns and increase differentiation of family members.

- **Interventions:** Educate through family evaluation (genogram), create a multigenerational lens, work on detriangling, and encourage differentiation.
Example of Genogram
Critiques of Family Emotional Systems Theory

- Not attentive to the different way that men and women are socialized re: fusion and differentiation – tends to pathologize women’s way of relating.

- Biases in “male-oriented” terminology – focus on being rational and objective vs. attention to feelings.

- Does not address contextual issues of gender – position of men as dominant and use of power.

- Lack of attention to other aspects of diversity (race, culture, etc.).
**Structural Family Theory**

- **Salvador Minuchin** (1921 - )
  - Eldest of three children raised in a closely knit small Jewish community in rural Argentina.
  - Trained as a child psychiatrist and became committed to importance of families in Israel.
  - Work at Wiltwyck School for Boys was pivotal to his theory and therapy – focus on family intervention for working with multi-problem families.
  - Director of the Philadelphia Child Guidance Clinic where he trained other family therapists.
Key Principles & Concepts

- **Major Premise of Family Structural Theory:**
  - Problems are a result of dysfunctional family *structure*, including use of authority, roles, rules, boundaries, communication, alliances, etc.
  - Major goal is to change structural aspects of the family’s system so that it becomes more functional (e.g., more flexible, clearer communication, healthier boundaries).
10 Interlocking Concepts:

1. **Family Structure:** The invisible and often unspoken patterns that organize how family members interact with one another.

2. **Sub-systems:** Sub-groupings within a family based on age (or generation) or function (e.g., parental subsystem, sibling subsystem).

3. **Executive Authority:** Refers to person(s) in family system that hold position of primary decision-making power.

3. **Boundaries:** Invisible barriers that regulate contact between members and sub-systems **within the family** (internal boundaries) and interaction **outside of the family** (external boundaries).
   a. Diffuse, too weak = “enmeshed boundaries”
   b. Rigid, too fortified = “disengaged boundaries”
5. **Rules:** Responsibilities and behaviors assigned to family members that they are expected to follow.

6. **Roles:** Various functions that family members have within the family system.

7. **Alliances:** When two family members or sub-systems interact cooperatively with one another.

8. **Triangles:** When two people in a family turn to a third family member for relief or support in order to deal with conflict they have with one another.

9. **Flexibility:** Refers to the capacity of the family system to make adjustment when needed to preserve positive family functions.

10. **Communication:** Refers to congruence and consistency of both verbal and nonverbal communication in family system.
Intervention Process For Structural Family Theory

Assumptions → Theory → Model → Assessment → Goals → Interventions

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Connection between Theory & Practice

- **Assumptions:** Individual behavior is related to the structure of their family systems.

- **Theory:** Problems in individual functioning stem from problematic family structures (e.g., boundaries, rules, roles); when aspects of family structure are changed, individuals have more options for healthy individual functioning.

- **Model:** Comprised of different in-session interventions and homework assignments designed to restructure family system.

- **Assessment:** Determine aspects of family structure by enactment (role-plays) in session with practitioner identifying both positive and negative family interaction patterns.

- **Goals:** Restructuring of the family’s system of interaction, so that family becomes more flexible, with an expanded availability of alternative ways of dealing with each other.

- **Interventions:** Joining techniques (building therapeutic system with family; supporting family strengths), disequilibrium techniques (reframing, problem tracking, rule modification, manipulating space, homework assignments, role playing), and psychoeducation (stress management and communication skills).
Critiques of Structural Family Theory

- Emphasis on structural components with minimal attention to emotions.

- Vulnerable to therapist deciding what “appropriate” structure should be based on own socio-cultural experience – can be insensitive to different ways of being a family, especially in terms of cultural differences, but also same-sex headed families.

- Critiques regarding lack of attention to “gender” as a structural variable; does not address contextual issue of male dominance and power in society.
Study Guide

- System
- Major Premises of System Theory
- Holon & Holarchy
- Focal system, Sub-system, Supra-system
- Input, Throughput, & Output
- Boundary (in GST)
- Open vs. Closed System
- Permeable
- Entropy & Negative Entropy (or Synergy)
- Feedback (positive and negative)
- Morphostasis & Morphogenesis
- Homeokinesis
- Equifinality
Study Guide con’t.

- Major Premise of Family Emotions System Theory
- Emotional Fusion
- Differentiation of Self
- Triangle /triangling (in FEST)
- Nuclear Family Emotional System
- Family Projection Process
- Multigenerational Transmission Process
- Emotional Cut-off
- Sibling Position

- Major Premise of Family Structure Theory
- Family Structure
- Sub-system (in FST)
- Executive Authority
- Boundaries (in FST) (Enmeshed & Disengaged)
- Rules
- Roles
- Alliances
- Triangles (in FST)
- Flexibility
- Communication