Maturational/Biological— Ethology
& Socio-Biology Applied to Lifespan
& Digital Communication
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- Ethology- Study of behaviors rooted in evolutionary/biological heritage
- Evolution process of organisms changing in response to pressures from changing environment.
 - o Variation in genetic heritage
 - o Genetic changes make survival possible
- Natural selection
 - o Sexual reproduction increases variation
 - o Develop mechanism to ensure survival of offspring
 - Offspring will use those traits needed to survive as well as modify these traits to be passed along (descent with modification)

Ethology

- Discrete Classes of biologically based behaviors
 - o Reflexes (appear early-sucking, grasping)
 - Taxis (unlearned orienting response to a stimulus—jump-back when startled)
 - Fixed action patterns (genetically programmed sequence of coordinated motor actions-
 - $_{\circ}~$ Signed stimulus \Rightarrow Innate releasing mechanism \Rightarrow Fixed action pattern
 - Infant loud cry (signed stimulus) → "Parental Child-Protection Alarm" (action specific energy) → Parent picks up infant ("Caring")
 - Child smiles (signed stimulus) → Adult Warmth/Love feelings cued → Parent returns smile ("Positive Communication")
- so Ethogram (observational method)
- $oldsymbol{\bowtie}$ Illustrations of ethology with studies of attachment

Socio-Biology First-level Causes Second-Level Causes Demographic Variables [birth-rate, death-rate, Phylogenetic inertia [Tendency to remain the same] - Genetic variability population size, geospatial location, etc.] Social Antisocial factors Behavior [Isolation] Complexity of behavior Rate of Gene Flow [Rate at which new Effect of change genes introduced] [Broad-narrow] Coefficient of Ecological Pressure [Have/Have not] Relationship [Degree of genetic sameness]

Socio-Biology

- prime directive-- genetic reproduction
- Romance and Parenting as socially developed means to ensure genetic reproduction
- n Communication studies—
 - Kory Floyd and Mark Morman (Leading scholars working within this paradigm). For example-
 - Biological parent & step-parent communication with children
 - Affectionate communication (Floyd & Deiss, in press)