

- Gene-Gene Interaction
 - Sex determination
 - Additive heredity: child's visible traits, phenotype, are a mix of the mother and father's traits; ex- height
 - Dominant/Recessive heredity: one version of the gene is dominant over the other
 - Regulator genes: some genes turn other genes on and off; ex- nose growth
 - Environmental influences
- Understanding the Heredity-Environment Relationship
 - Behavioral Genetics: Exploration of nature and nurture's influences on diversity in people.
 - Current belief: Heredity & Environment work together
 - Factors such as temperature, light, nutrients, and other chemicals affect proteins produced by the body
 - The nurturant rat studies
 - Whether rat pups raised by nurturant or non-nurturant moms affected expression of genes regulating the stress response was altered by environment
- Genotype-Environment Interaction
 - Inherited traits lead to different characteristics in different contexts
 - Reaction Range:
 - inherited traits seen as an array of possibilities rather than fixed points
 - One's unique genetically determined response to environment, range of possibilities
- Genotype-Environment Correlations
 - Our genes influence the environments to which we are exposed
 - Passive gene-environment correlations
 - Parents provide both genes and environments for their children
 - Ex- musically talented parents pass on musical genes and environment
 - Evocative gene-environment correlations
 - Genotypically different individuals elicit different responses from their environments
 - Ex- smiley baby vs. shy baby
 - Active gene-environment correlations
 - Correlations occur because children select contexts that they find stimulating and rewarding
 - Ex- choosing your career
- Environmental Influences on Gene Expression
 - Parents and other caring adults can uncouple unfavorable genetic-environmental correlations.
 - For example, twins who displayed aggressive behavior could be positively affected by mothers who practiced good, positive parenting
 - Epigenetic Framework: bidirectional exchanged between environment, behavior, and gene expression in individual development concerning the child and the parents
- Environmental Contexts for Development
 - Family Influences on Development

- Direct
 - parents & children directly influence each other
 - Research shows Direct influences of family
 - When parents are firm but also warm and affectionate, they have cooperative kids
 - When children comply with parents requests, there is a greater likelihood for future warm and gentle parenting
 - Harsh discipline leads to greater child misbehavior which can lead to more use of harsh punishment
- Indirect
 - Third parties can either support or undermine other family relationships.
 - Adapting to Change
 - Changes from within and outside the family
 - Family is dynamic, changing
 - Members adapt to changes
 - Development of family members
 - Historical time period
- Socioeconomic Status (SES) and Family Functioning
 - An index of families' Social position & economic well-being
 - Includes: education of parents, job prestige, skills required for job, income
 - Timing of Family Life Cycle
 - Skilled & semi-skilled workers tend to marry earlier, have kids earlier, and have more kids
 - Vs. Professionals & Technical occupations
 - Values and Expectations
 - What do they value in children?
 - Higher SES
 - More likely to emphasize psychological traits (happiness, curiosity)
 - Lower SES
 - More likely to emphasize external characteristics (obedience, neatness)
 - Communication and Discipline Styles
 - Higher SES vs. Lower SES
 - Higher SES
 - Infants & preschoolers are talked to and stimulated more
 - School-aged: more warmth, explanation, verbal praise, set higher developmental goals
 - Lower SES
 - More commands, criticism, and physical punishment
 - Children's Cognitive Development
 - Higher SES associated with higher cognitive and language development, higher success in school, lower emotional and behavioral problems
 - Economic status influence cont. :Affluence

- o Many affluent parents are not physically and emotionally available for their children.
 - o These parents often make excessive demands for achievement.
 - o Adolescents whose parents value achievement over character often have academic and emotional problems.
- Eating Dinner Together Can Make a Difference
 - o Children who eat dinner with their parents have lower rates of anxiety and depression, lower rates of delinquency and substance abuse, and higher grades than those who don't regularly eat together as a family
- Economic status influence cont. Poverty
 - o 13% of US is poor
 - o Most affected are:
 - Parents under 25 w/ young kids
 - Elderly living alone
 - Ethnic minorities
 - Women: especially single moms with preschool kids (50%)
 - o Poverty rate is higher among children than any other age group
 - o The earlier poverty starts, the deeper it is, the longer it lasts, and the more devastating are its effects on physical and mental health
- Poverty = constant stress
 - o Daily hassles and crises: lower parents ability to effectively deal with kids
 - o Poor housing and dangerous neighborhoods raise stress levels and have lower social support (less of a community looking out for the children)
- The Homeless Problem
 - o 350,000 homeless in Canada and the United States
 - o 25-40% are families with small children
- o Neighborhoods
 - Neighborhoods offer resources and social ties that play an important part in children's development.
 - Higher-SES families are less dependent on their immediate surroundings than are low-SES families.
 - Social ties linking families together break down in areas with unemployment, crime, and population turnover.
- o Towns & Cities and their Schools
 - Children spend an average of 14,000 hours in school by the time they reach high school graduation.
 - Parent-school contact supports development at all ages.
 - **Studies show that kids whose parents volunteer in their classes do better in school
- o The Cultural Context
 - Culture shapes every aspect of daily life.
 - Different cultures have different values.