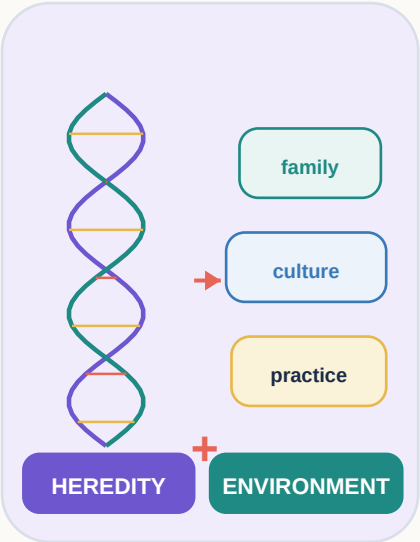
AP PSYCHOLOGY | UNIT 1

TOPIC 1.1

Interaction of Heredity and Environment

Behavior and mental processes emerge from inherited predispositions working together with experience and context.



THE CORE INTERACTION

PREDISPOSITION → increased likelihood

EXPERIENCE → support, stress, culture

CONTEXT → when and where

OUTCOME → behavior or thought

BY THE END, YOU SHOULD BE ABLE TO...

1. Explain why nature and nurture work together rather than compete.
2. Distinguish a predisposition from a guaranteed outcome.
3. Describe what twin, family, and adoption studies can and cannot show.

BIG IDEA

Genes influence possibilities; environments shape expression. A strong psychological explanation describes the interaction instead of claiming that one side acts alone.

1 Nature works with nurture

Start with the two influences, then explain how their combination shapes an outcome.

NATURE / HEREDITY

Inherited or predisposed characteristics that may influence traits, behavior, and mental processes.

MAY INFLUENCE

- temperament and tendencies
- abilities or vulnerabilities
- responses to later experience

NURTURE / ENVIRONMENT

External conditions and experiences that influence development, behavior, and mental processes.

INCLUDES

- family, peers, and education
- culture, nutrition, and stress
- practice, sleep, and opportunity

INTERACTION IN ACTION

CAUTIOUS — inherited tendency → **SUPPORT** — safe classroom → **PRACTICE** — repeated participation → **CONFIDENCE** — behavior changes

PREDISPOSITION IS NOT DESTINY

Likelihood

A predisposition makes an outcome more likely; it does not make the outcome certain.

Variation

The same tendency can lead to different outcomes in different settings, and the same setting can affect people differently.

AVOID SINGLE-CAUSE CLAIMS

Weak: genes cause the behavior. Weak: experience causes everything. Strong: an inherited tendency and environmental conditions combine to influence the outcome.

2 Evidence, evolution, and caution

Use research to estimate influence, and keep conclusions proportional to the evidence.

BEHAVIORAL-GENETICS DESIGNS

Design	What is compared	What it helps estimate
Twin	Similarity between twins, often including identical and fraternal twins.	Relative genetic and environmental influence.
Family	Patterns among biological relatives who share genes and often environments.	Whether traits cluster within families.
Adoption	Adopted people compared with biological and adoptive relatives.	Influence linked more closely to heredity or home environment.

IMPORTANT LIMIT

These designs estimate patterns of influence. They do not prove that one factor alone causes a behavior.

EVOLUTIONARY PERSPECTIVE

VARIATION
individuals differ

→

SELECTION
some traits aid survival or reproduction

→

GENERATIONS
related traits may become more common

USEFUL QUESTION

How might a behavior or mental process have supported survival or reproductive success across many generations?

CAUTION

Evolutionary explanations need evidence. Avoid unsupported stories, and reject discriminatory misuse of heredity such as eugenics.

REMEMBER

Behavior is rarely explained by genes alone or environment alone. Describe the evidence, the interaction, and the limits of the conclusion.