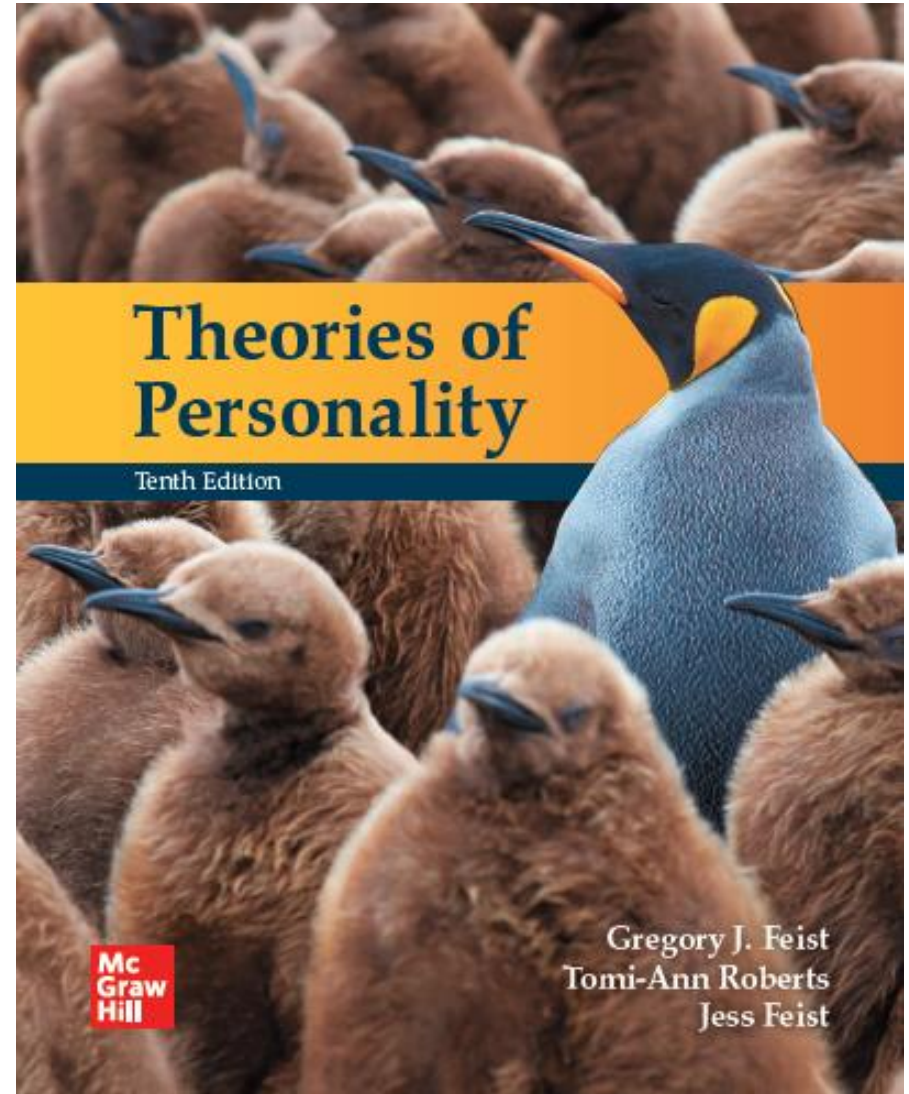


Eysenck's Biologically Based Factor Theory

Chapter 14



Hans J. Eysenck



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Chapter Outline

- Overview of biologically based trait theory.
- Biography of Hans J. Eysenck.
- Eysenck's factor theory.
- Dimensions of personality.
- Measuring personality.
- Biological bases of personality.
- Personality as a predictor.
- Related research.
- Critique of Eysenck's biologically based theory.
- Concept of humanity.

Overview of Biologically Based Trait Theory

Eysenck developed a factor theory much like McCrae and Costa.

- Derived only three, rather than five, dimensions of personality.
 - **Extraversion slash introversion.**
 - **Neuroticism slash stability.**
 - **Psychoticism slash superego function.**

Biography of Hans J. Eysenck

- Born in Berlin, Germany in 1916.
- As a teenager, he moved to England to escape Nazis.
- Received his P h D in psychology at the University of London in 1940.
- Published *Dimensions of Personality* in 1947.
- One of the most prolific and controversial psychologists in the world.
- Died in 1997.

Eysenck's Factor Theory ¹

Criteria for identifying factors.

- Psychometric evidence.
- Heritability.
- Must make sense from a theoretical point of view.
- Must possess social relevance.

Eysenck's Factor Theory ²

Hierarchy of behavior organization, from lowest to highest.

- Specific acts or cognitions.
- Habitual acts or cognitions.
- Traits.
- **Types** or superfactors.

Dimensions of Personality

Three general superfactors.

- **Extraversion, or E.**
- **Neuroticism, or N.**
- **Psychoticism, or P.**

Measuring Personality

Eysenck created four inventories for measuring superfactors.

- Maudsley Personality Inventory, or M P I.
- Eysenck Personality Inventory, or E P I.
- Eysenck Personality Questionnaire, or E P Q, which was revised as the Eysenck Personality Questionnaire-Revised.

Biological Bases of Personality

Three fourths of the variance of personality dimensions can be accounted for by heredity.

- Researchers have found identical factors among people in various parts of the world.
- Evidence suggests that individuals maintain their position over time on different personality dimensions.
- Research on twins suggests strong similarities on these dimensions.

EXTRA NOTES

- Eysenck argues that people are born with a certain personality.
- There are basic characteristics that remain constant throughout their lives.
- Extraversion refers to the degree to which a person is outgoing and excitement-seeking.
- Neuroticism refers to the degree of natural anxiety a person has.
- Someone who is considered highly psychotic is likely to be reckless, trouble-making, cruel, insensitive, hostile, and thrill- and risk-seeking (Eysenck 1987).
- Eysenck treats extraversion and neuroticism as variables with physiological differences.
- He argues that people with high levels of extraversion have lower levels of cortical arousal. They are motivated to seek stimulation and excitement.
- The autonomic nervous systems of those high in neuroticism are seen as more unstable, and therefore they are more prone to mood swings and negative emotional experiences (depression, anxiety, poor self-esteem) without any specific reason.
- According to Hans Eysenck, the stimulations of the cerebral cortex determine people's temperament. From a biological point of view, those who have a low cerebral cortex stimulation threshold, those who listen to loud music, those who can perform much more successful actions in crowded and noisy environments, and those who drive at high speed are defined as "hungry for more stimulation". Why? Since the threshold is low, it needs to be exposed to a lot of stimuli to be stimulated.
- According to Eysenck, people with a high cerebral cortex stimulation threshold are the people we explain today with the schizoid character pattern. He is afraid of noise, he gets disturbed; human voices and crowds are a big problem for him. Driving at high speed is never his thing, it's risky. Since the threshold is already very high, they do not want to stimulate the cerebral cortex any further, they do not want to receive any stimulation.

Personality as a Predictor ¹

Personality and behavior.

- Eysenck and Eysenck, 1997 a.
- Eysenck and Eysenck, 1995.
- Eysenck and S. B. G. Eysenck, 1975.

Personality as a Predictor ²

Personality and disease.

- Several studies have found an association between personality and disease.
- These do not prove that psychological factors cause disease, but they may interact with other factors to create risk.

Related Research

The biological basis of extraversion.

- Eysenck, 1990.
- Stelmack, 1990, 1997.
- Beauducel, Brocke, and Leue, 2006.

The biological basis of neuroticism.

Critique of Eysenck's Biologically Based Theory

Trait and factor theories are:

- Very high on generating research and parsimony.
- High on organizing knowledge.
- Moderate on falsifiability.
- Moderate to low as a guide for practitioners and internal consistency.

Concept of Humanity

- Determinism over free choice.
- Eysenck is not concerned with optimism versus pessimism.
- Causality over teleology.
- Equal preference for biology over social influence.
- Unconscious over conscious.
- Individual differences over similarity.



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