

The top section of the slide features a blue-tinted background image of people holding up paper masks with various facial expressions. Overlaid on the left side of this image is the word "Personality" in a large, white, sans-serif font, with the subtitle "What makes us who we are?" in a smaller, white, sans-serif font below it.

Psych 305A: Lecture 18

Evolutionary Approach Wrap Up

The Cognitive Approach Part I
Learning and Behaviorism

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**Evolutionary Perspective:
Wrap Up**

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**Importance of
“Good
Financial
Prospect”
When
Selecting a
Mate**

Table 10.6 Importance of “Good Financial Prospect”
When Selecting a Mate

Sample	Males	Females
<i>Africa</i>		
Nigeria	1.37	2.30
South Africa (Whites)	0.94	1.73
South Africa (Zulus)	0.70	1.14
Zambia	1.46	2.33
<i>Asia</i>		
China	1.10	1.56
India	1.60	2.00
Indonesia	1.42	2.55
Iran	1.25	2.04
Israel (Jewish)	1.31	1.82
Israel (Palestinian)	1.28	1.67
Japan	0.92	2.29
Taiwan	1.25	2.21
<i>Eastern Europe</i>		
Bulgaria	1.16	1.64
Estonia	1.31	1.51
Poland	1.09	1.74
Yugoslavia	1.27	1.66

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Table 10.6 (continued)

Sample	Males	Females
<i>North America</i>		
Canada (English)	1.02	1.91
Canada (French)	1.47	1.94
United States (Mainland)	1.08	1.96
United States (Hawaiian)	1.50	2.10
<i>Oceania</i>		
Australia	0.69	1.54
New Zealand	1.35	1.63
<i>South America</i>		
Brazil	1.24	1.91
Colombia	1.72	2.21
Venezuela	1.66	2.26

Note: Participants rated on a scale from 0 (Unimportant) to 3 (Indispensable). From Buss (1989).

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Evidence for Evolutionary Perspective: The Big Five

- The Big Five are the most important categories of personality across cultures
- From an evolutionary perspective, why might humans place importance on these 5 traits?

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Big Five = innate psychological mechanisms and behavioral strategies that developed to help us solve problems of survival and reproduction.

SURVIVAL PROBLEM

EXTRAVERSION → social rank, cooperation
(social skills, activity, leadership, assertiveness)

EMOTIONAL STABILITY → resilience to stress, adaptability
(anxiety, worry, self-approval, moodiness)

AGREEABLENESS → intimacy/mating, altruism
(empathy, generosity, conformity)

CONSCIENTIOUSNESS → work, trust, dependability
(will, no impulsivity, responsibility, orderliness)

OPENNESS → learning, exploration, versatility
(curiosity, creativity, flexibility)

Being able to PERCEIVE the Big 5 in other people has adaptive value:

Would this person be a good leader?	E
Will he survive hard times?	N
Will she love our family?	A
Can I rely on him?	C
Will her wisdom help me?	O

Evolution of Big Five

- But, high end of each trait cannot be complete adaptive
 - If so, we wouldn't see normal variation on traits in all human populations
 - Heritability of that variation suggests that the *variation* is what is adaptive
- Trade-off perspective (Nettle, 2006)
 - All levels of each trait have costs and benefits

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Nettle, 2006

Table 1

Summary of Hypothesized Fitness Benefits and Costs of Increasing Levels of Each of the Big Five Personality Dimensions

Domain	Benefits	Costs
Extraversion	Mating success; social allies; exploration of environment	Physical risks; family stability
Neuroticism	Vigilance to dangers; striving and competitiveness	Stress and depression, with interpersonal and health consequences
Openness	Creativity, with effect on attractiveness	Unusual beliefs; psychosis
Conscientiousness	Attention to long-term fitness benefits; life expectancy and desirable social qualities	Missing of immediate fitness gains; obsessiveness; rigidity
Agreeableness	Attention to mental states of others; harmonious interpersonal relationships; valued coalitional partner	Subject to social cheating; failure to maximize selfish advantage

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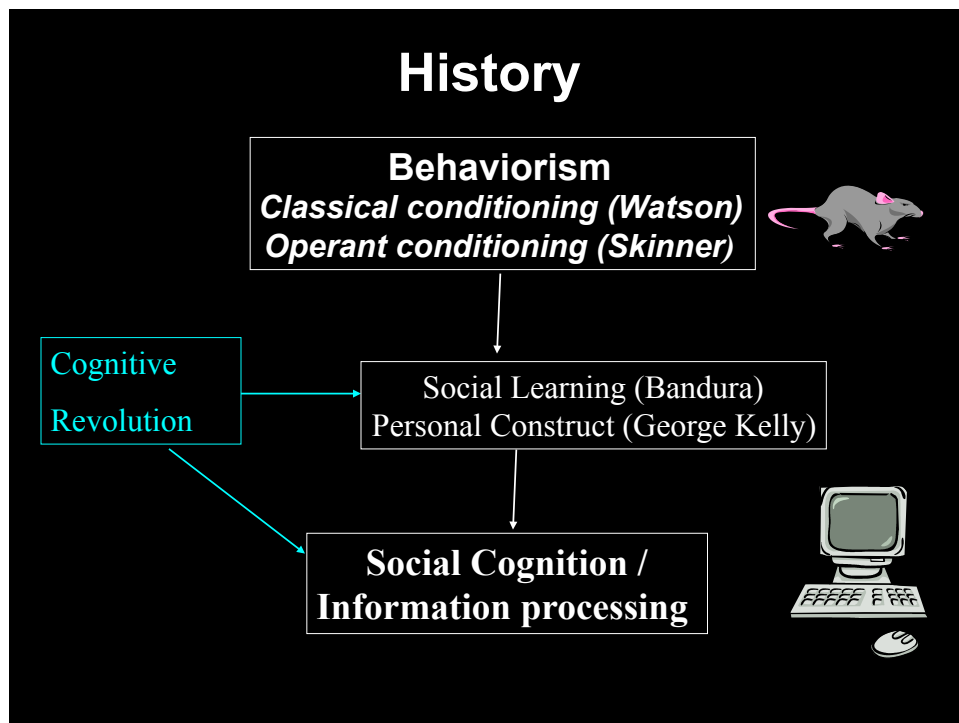
Evolutionary Approach and Individual Differences

- Why are some people introverted, if extraversion is adaptive?
 - Frequency-Dependent Selection
 - Certain traits are adaptive ONLY if there are also people who have the opposite
 - What if everyone was extroverted?
 - What if no one was neurotic?
 - Environmental Triggers
 - We all have the potential to become neurotic, but it is more adaptive in adverse conditions
 - Evidence for environment + gene interaction in depression

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The Cognitive Approach to Personality

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Personality Defined by a Behaviorist

- *“Personality involves the discovery of the unique set of relationships between the behavior of an organism and its reinforcing or punishing consequences”*
 - Skinner, 1974
- Translation: Personality is a set of learned responses to the environment
- Person = rat

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Skinner's Approach

- Method: Systematic observation and controlled experimentation
 - No inferences into the “black box” of personality
- Data: Directly observable behavior that can be assessed objectively
- Subjects: mainly lab animals (rats, pigeons), but some humans
- Emphasis: Environmental causes of behavior and personality (i.e., nurture)

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Behaviorist Approach

- We can only study observable behavior
- ‘Mind’ (spirit, motivation, soul) does not explain behavior
- Personality (behavioral tendencies) is shaped by what we learn from the environment
 - Classical Conditioning
 - Operant Conditioning

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Classical Conditioning



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Operant Conditioning



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The Essence of Behaviorism

- ***"The consequences of behavior determine the probability that the behavior will occur again"***
– ***BF Skinner***

- Anyone's personality can be formed or changed through patterns of reinforcement and punishment
- If you are extraverted, that's because extraverted behaviors were rewarded by the people who raised you

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A Clockwork Orange



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Classical Conditioning

- Alex injected with nausea drug (*unconditioned stimulus*) while watching violence
 - Alex feels nauseous (*unconditioned response*)
- Alex thinks about violence or acts violent (*conditioned stimulus*)
 - Alex feels sick and avoids acting violent (*conditioned response*)
- Would this approach work for real juvenile delinquents?

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Did the conditioning process change Alex' s personality?

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Message of Movie: Society Can' t Produce Morality

- Satire about societal attempts to make people good/moral
 - Psychological conditioning can' t make people good
 - People must choose to be good/moral
 - But, Kubrick made the movie before the reign of behavioral genetics– what would he say now?

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View of Skinner Today

- Not very good
 - If we're interested in HUMANS, it's ok (and even good!) to study mental states
- Yet, behaviorism remains an important part of personality, and psychology more generally
 - Behavioral evidence considered strongest
 - Emotion expression research
 - Subjective reports (e.g., self-report data) often suspect
 - Importance of O, T data

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Toward the Acceptance of Mental States: The Cognitive Perspective

- After Skinner, focus shifted from the behavioral output of reward (dog sitting) to what goes on *between* the environmental trigger (bell) and reward (steak)
- Social Learning
 1. Observe behaviors of others being rewarded
 2. Use your MIND to connect the two
 3. Decide to behave similarly

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Next Class

- Modern Cognitive Approach
 - If you already read Larsen & Buss, Chapter 12, NO HOMEWORK!

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