

# Personality

What makes us who we are?

Psychology 305A  
Lecture 12

Trait Taxonomies  
Personality Change and Stability

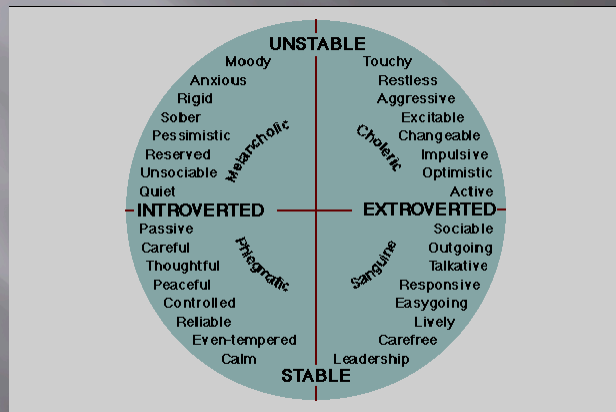
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## Trait Taxonomies: Organizing Personality

- Theoretical approach: Hans Eysenck
  - Personality taxonomy should be rooted in biology
- 3 major traits of interest: “PEN”
  - **P**sychoticism (related to testosterone level)
  - **E**xtraversion (related to physiological arousal)
  - **N**euroticism (related to fluctuations in autonomic nervous system)



## Eysenck's 'Big Two': Neuroticism and Extraversion



Circumplex taxonomy

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## Circumplex Taxonomies

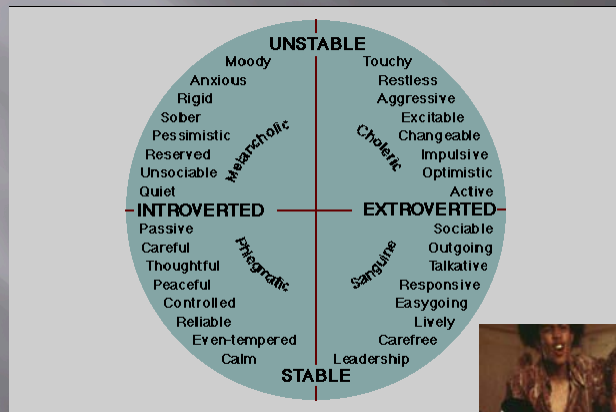
- Broad level factors are statistically independent
  - Your level on one factor does not have any relation to your level on another factor
  - Possible to be high N + high E, high N + low E, low N + low E, or low N + high E



Frank the Tank: Low N, High E  
 Low N: Not concerned about anything  
 High E: High energy, party animal

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## Eysenck's 'Big Two': Neuroticism and Extraversion



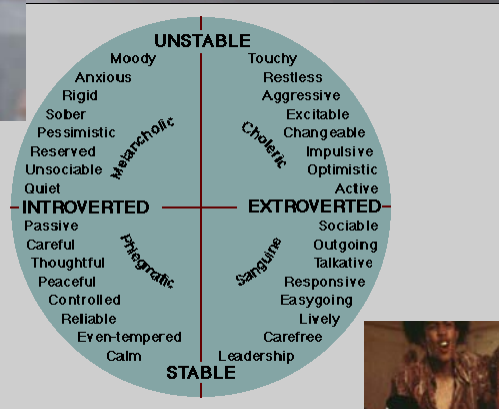
## Circumplex Taxonomies

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Cameron Frye: High N, Low E  
 High N: Anxious about germs, social life  
 Low E: Does not have many friends

## Eysenck's 'Big Two': Neuroticism and Extraversion



## Problems with PEN

- Not all-inclusive
  - Other empirical studies found more than 3 factors
- Other traits show heritability
  - e.g., conscientiousness
- Other taxonomies developed to address issues
  - Wiggins' theory of interpersonal traits
    - Agency + Communion
  - Cattell's 16
  - The Five Factor Model (FFM)

## The Five-Factor Model (FFM) or “Big 5”



Costa & McCrae, 1992; Goldberg, 1981

## The Five-Factor Model (FFM) or “Big 5”

- ▣ Openness
  - Curious and unconventional
- ▣ Conscientiousness
  - Ordered and persistent
- ▣ Extraversion
  - Exuberant and sociable
- ▣ Agreeableness
  - Caring and considerate
- ▣ Neuroticism
  - Emotional and anxious

Costa & McCrae, 1992; Goldberg, 1981

## FFM: Factor Analysis

- Lexical studies of the dictionary
  - Started with 17,953 trait terms (Allport & Odbert)

Artistic Curious Cultured Imaginative Penitent Conventional Cautious Industrious Orderly Responsible Assertive Enthusiastic Energetic	Altruistic Caring Modest Tender Trusting Anxious Angry Depressed Self-Conscious Vulnerable Gregarious Warm
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**O**penness  
**C**onscientiousness  
**E**xtraversion  
**A**greeableness  
**N**euroticism 11

## FFM: Strong Empirical Support

- Factor analysis repeatedly finds five factors
  - Cross-cultural replication
  - Genetic links
  - Cross-species replication
    - e.g., dogs, hyenas, monkeys



Extraverted chimp



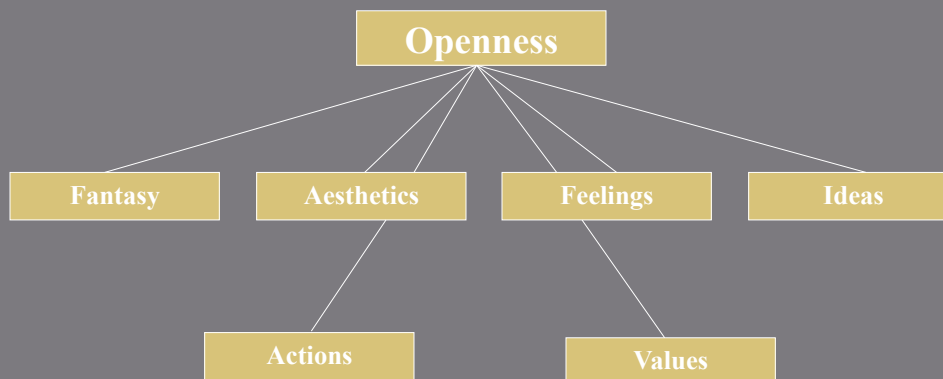
Introverted chimp

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## FFM: Traits have Sub-Facets

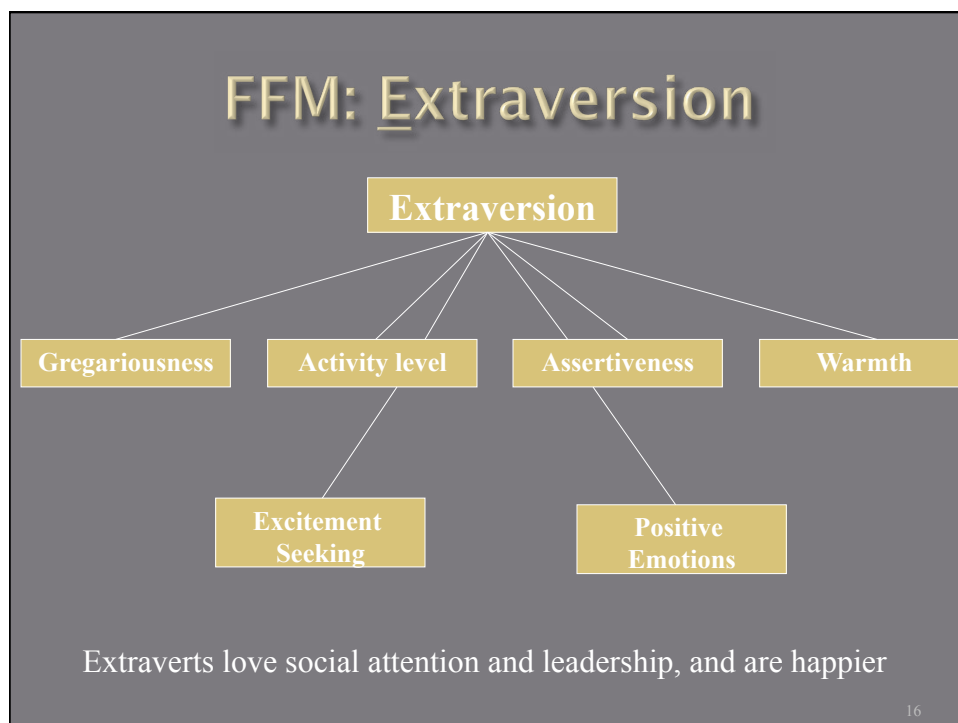
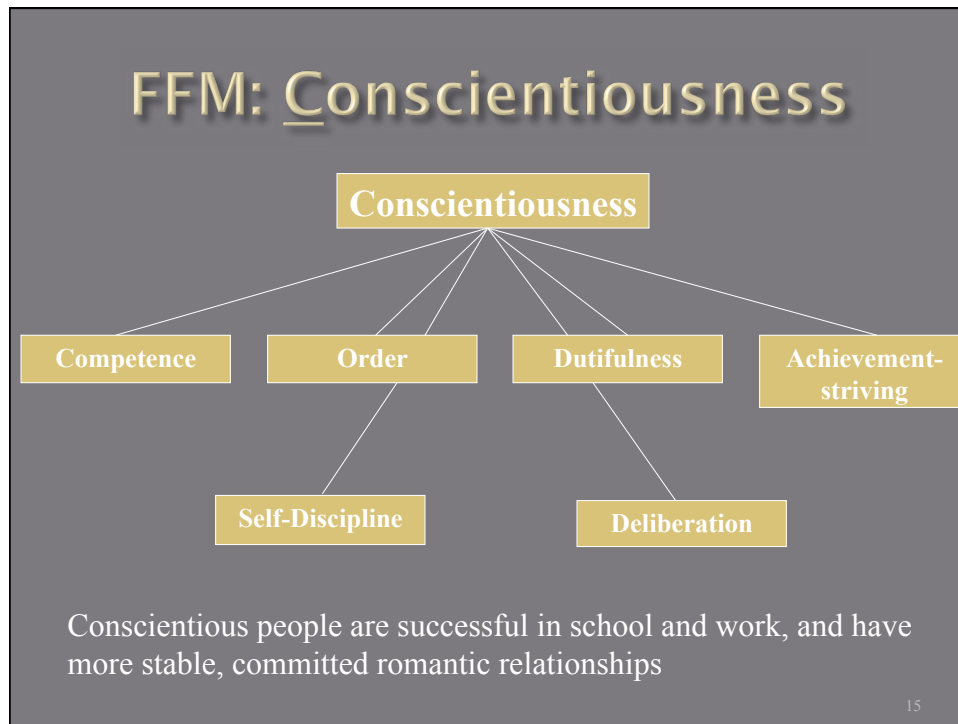
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## FFM: Openness to experience

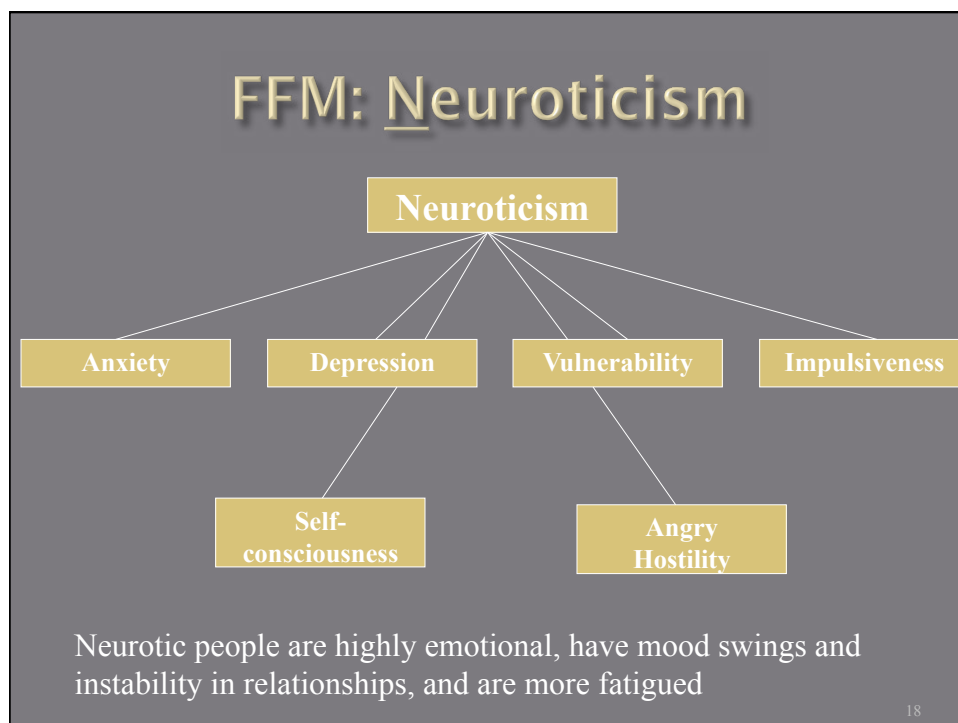
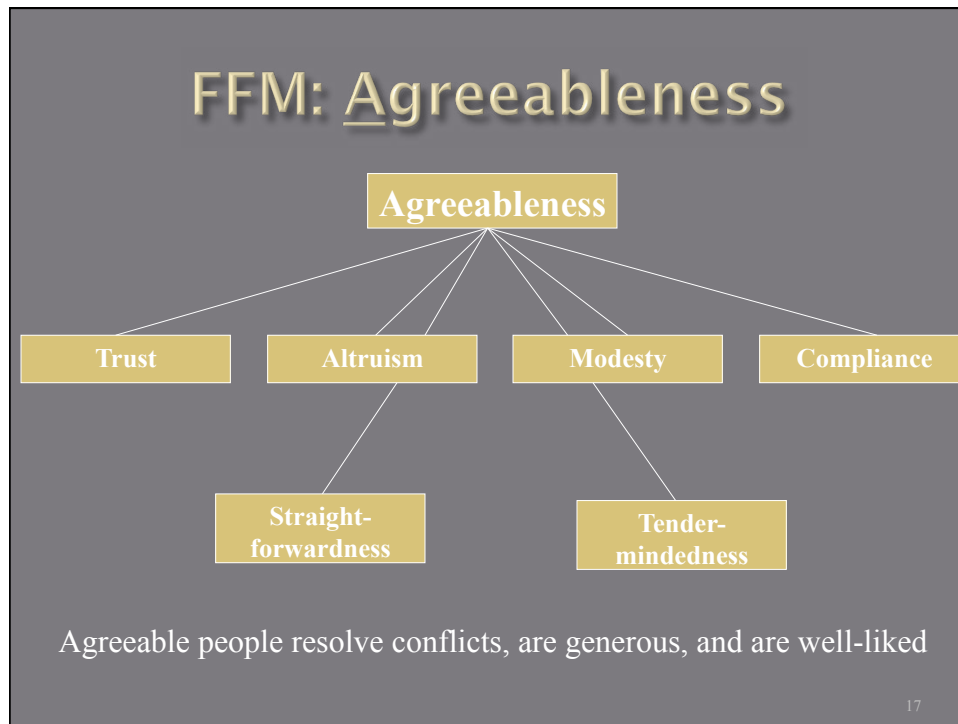


Open people remember dreams better, are more creative, and enjoy novel experiences

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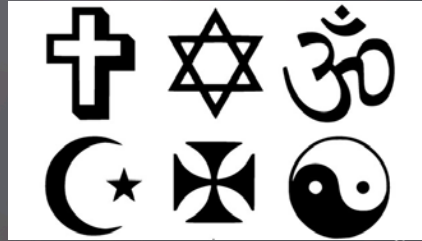






## What's Missing from Big 5?

- ▣ Physical attractiveness and promiscuity
- ▣ Positive evaluation and negative evaluation
  - “Big 7”
- ▣ Honesty/humility
  - HEXACO model
- ▣ Religiosity/spirituality



## FFM and PEN

- ▣ Extraversion
  - PEN Extraversion
- ▣ Neuroticism
  - PEN Neuroticism
- ▣ Agreeableness
  - PEN Psychoticism (low)
- ▣ Conscientiousness
  - PEN Psychoticism (low)
- ▣ Openness to Experience
  - PEN?



## Personality Stability and Change



This is somebody famous. Who is it?

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## Stability of Personality

- By definition, traits are stable dispositions across:
  - Situations
  - Time
- Traits are NOT completely “set like plaster”



1970 & 1980s-----2006

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## Two Types of Change

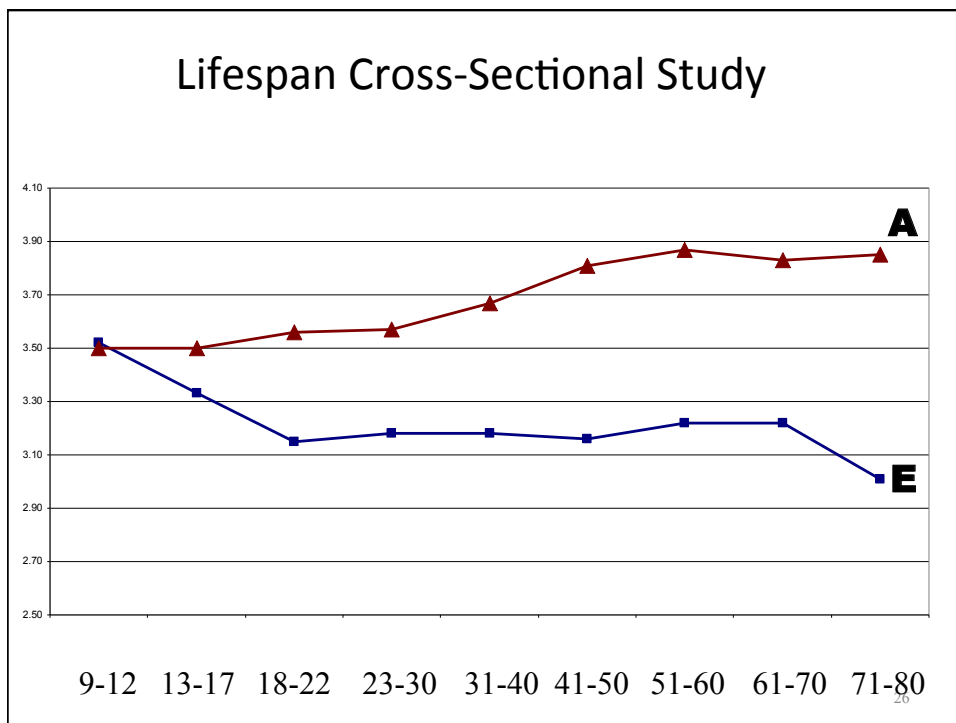
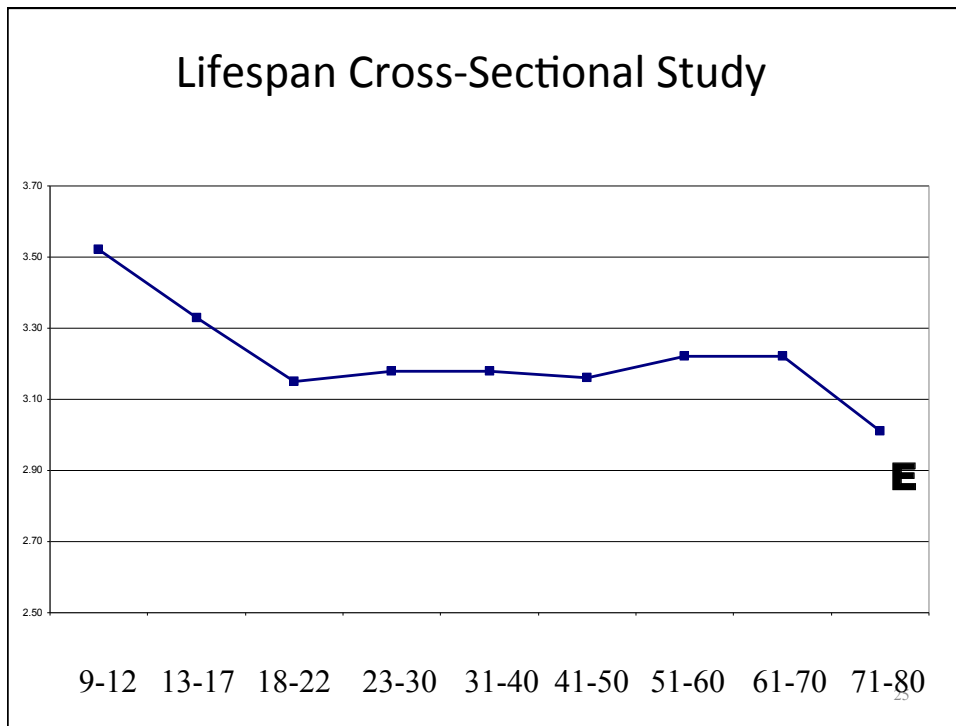
- ▣ Mean-level change: People's average level of a trait at different ages
- ▣ Are people on average more extraverted when they are younger or older?

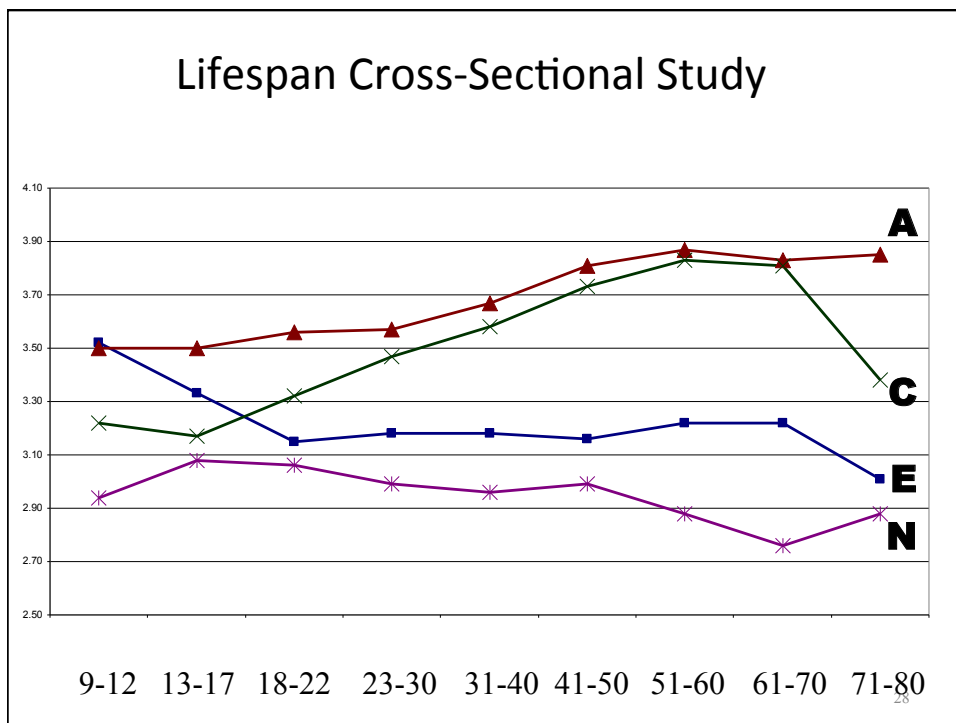
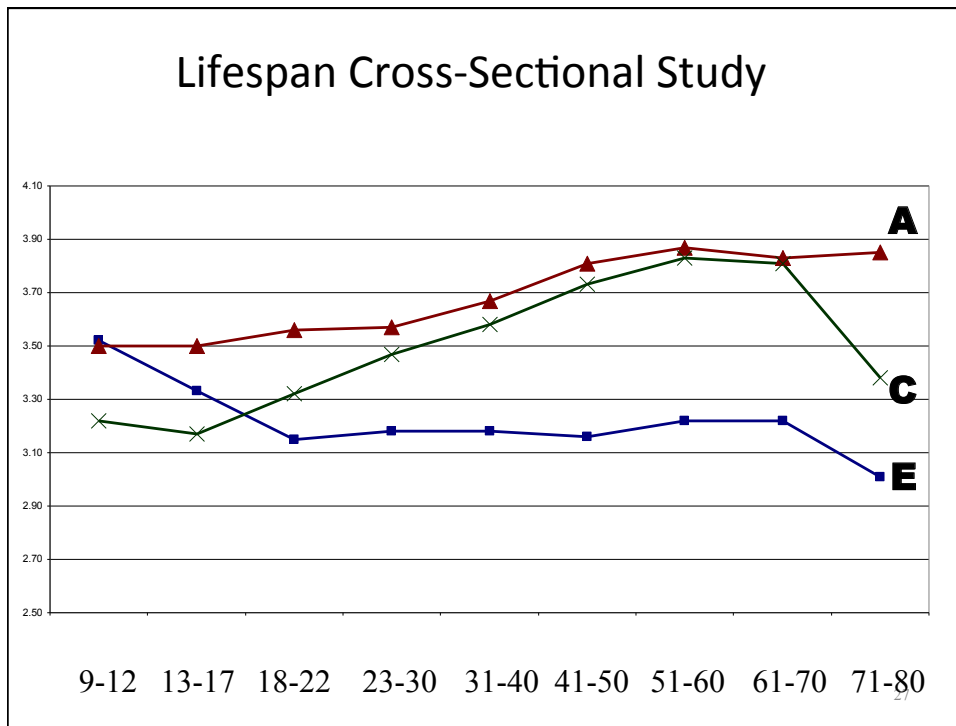
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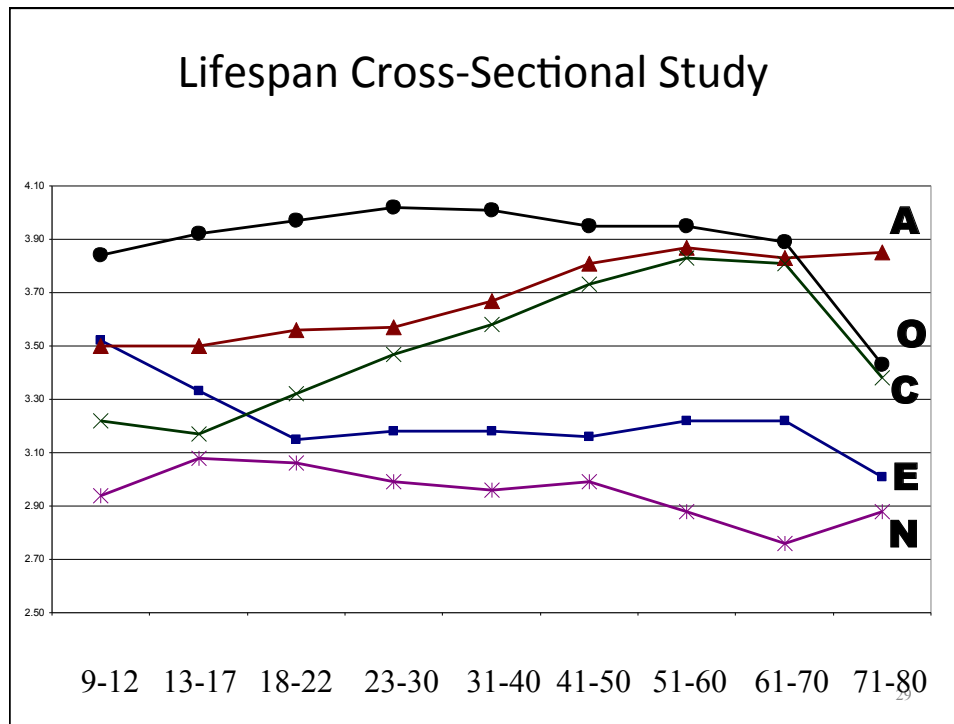
## Mean Level Change Across Lifespan

- ▣ Cross-sectional study
  - Sample of approximately 130,000 adults reported Big 5 personality traits
  - Representative of population in US and Canada
  - Childhood to old age

Srivastava, John, Gosling, & Potter, 2003







## Personality Change in College

- Study compared personality scores at beginning and end of university among 270 students

### Two Assessments

- Year 1 (beginning of first year)
  - Year 4 (end of senior year)
- Which traits do you think increased? Decreased?

Robins, Fraley, Roberts, & Trzesniewski, 2001

## Longitudinal University Study

<u>Big Five Dimension</u>	<u>Change during university</u>
Extraversion	0
Agreeableness	+
Conscientiousness	+
Openness	+
Neuroticism	-

Maturity principle: People tend to increase on traits that promote optimal behavior in adult social roles, and decrease on less socially desirable traits

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## Two Types of Change

- Mean-level change
- Rank-order stability
  - Consistency of individual differences on traits
  - Is the most extraverted child still the most extraverted adult?
  - Is the least agreeable college student still the least agreeable 40 year-old?

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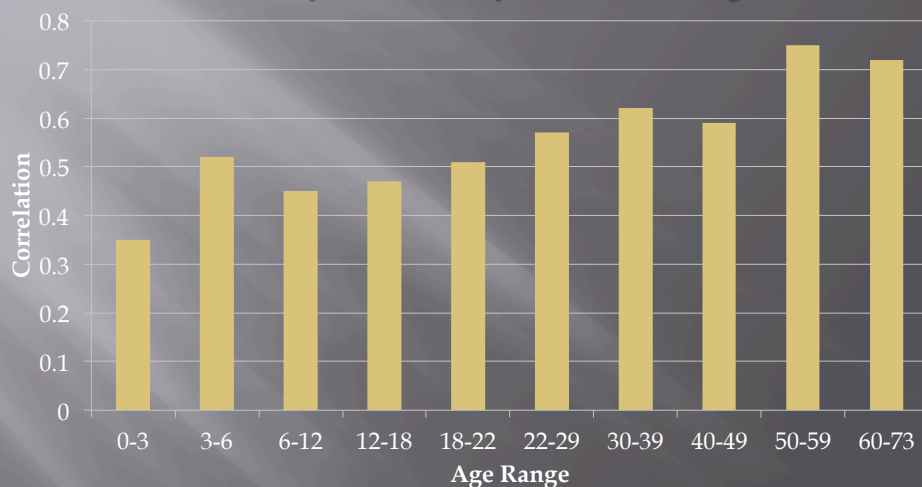


## Stability at Different Ages

- Meta-analysis
  - Compiled results from all studies ever done on personality change and development
  - Compared “personality consistency” across ages
    - At which ages was the correlation between personality at  $T_1$  and personality at  $T_2$  highest?
    - Correlation: Same group of people measured at two ages
      - e.g., 3 & 4, 23 & 29, 55 & 72
      - High correlation implies high personality consistency

Roberts & DelVecchio, 2000

### Personality Consistency at Different Ages



Personality is somewhat inconsistent in childhood and young adulthood  
 Personality becomes increasingly stable throughout middle age  
 Personality is extremely stable in old age

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## Two Types of Change

- Mean-level
- Rank-order
  
- Why does personality change or stay stable?

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## Why do We Change or Stay Stable?

- Person-environment transactions
  - People select situations based on their personalities
    - e.g., a conscientious individual enrolls in an honor's class
  - Situations in turn influence people's personalities
    - e.g., an honors student becomes more conscientious



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## One Specific Life Event: Going Abroad for School

- ▣ How many of you have studied abroad?
- ▣ Why? Was it because of your personality?
- ▣ How did it change who you were?



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## Studying Abroad & Personality Change

- ▣ 1,134 students tracked across school year
  - Half study abroad, half at home
- ▣ Who studies abroad?
  - Extraverts



Zimmerman &amp; Neyer, 2013

## Studying Abroad & Personality Change

- ▣ 1,134 students tracked across school year
  - Half study abroad, half at home
- ▣ How does studying abroad change personality?
  - Increases in openness and agreeableness



Zimmerman & Neyer, 2013

## Bigger Picture: Personality → Life Events

Trait	High levels lead to	Low levels lead to
O		Becoming unemployed
C		Getting divorced
E	Moving in with partner	
A		Getting divorced
N	Living at home Getting divorced	Getting married

Sample of ~ 15,000 German adults, followed over four years

Specht, Egloff, & Schmuckle, 2011; 2012

## Bigger Picture Life Events → Personality Change

Trait	Events lead to increases	Events lead to decreases
O	Getting divorced	Getting married
C	Starting first job	Retiring
E		Getting married
A	Having a baby	
N	Moving out of parent's home	

Sample of ~ 15,000 German adults, followed over four years

Specht, Egloff, & Schmuckle, 2011; 2012

## Stability and Change: Summary

- Personality **changes** across the lifespan
  - Mean-level shifts
- Personality is **consistent** across the lifespan
  - Different levels of consistency emerge in childhood, adulthood, and old age
- Change and consistency is dictated in part by **person-environment transactions**
  - Who we are leads us to take on certain roles
  - Our roles in turn shape who we are

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## Next Class

- ▣ Trait approach (wrap-up)
- ▣ Genetics (begin)

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## THANKS

Comments? Questions? Feedback?  
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