

Personality

What makes us who we are?

Psychology 305A
Guest Lecture: Eric Mercadante

Trait Taxonomies
Personality Change and Stability

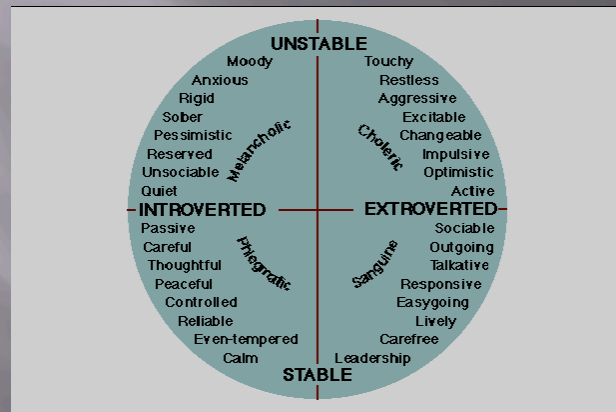
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Trait Taxonomies: Organizing Personality

- 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

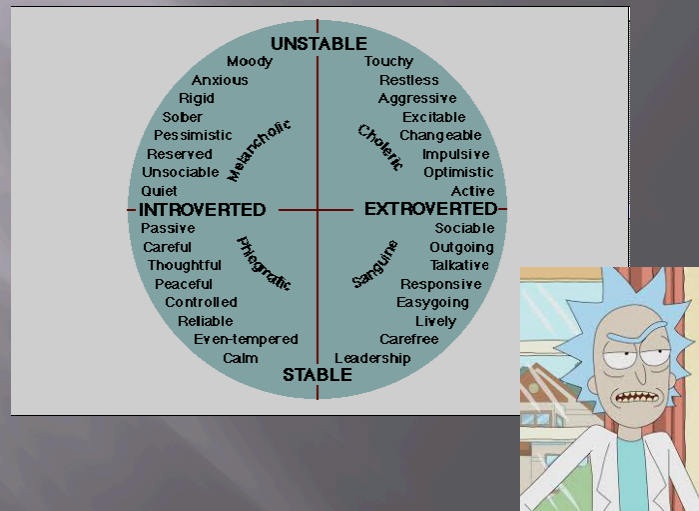
- Broad level factors are statistically independent
 - Your level on one factor does not have any relation to your level on another factor
 - Possible to be high N + high E, high N + low E, low N + low E, or low N + high E



Rick Sanchez: 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



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Circumplex Taxonomies

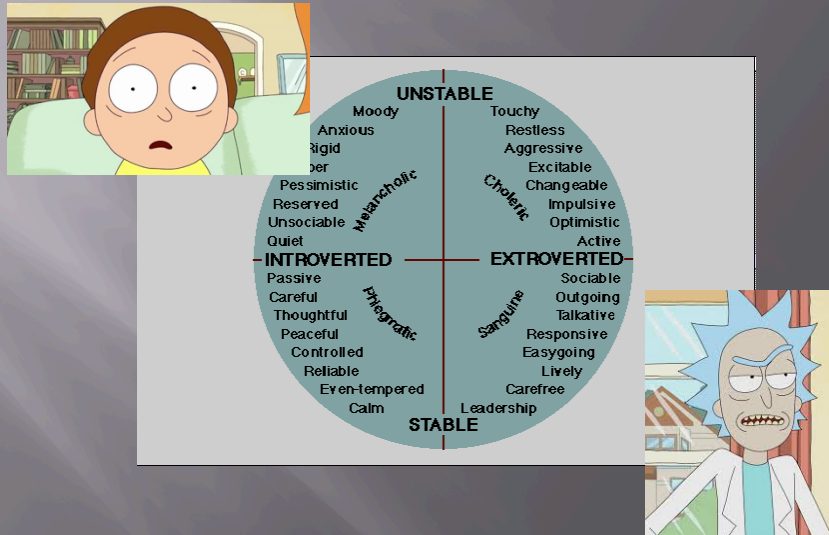
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Morty Smith: High N, Low E
 High N: Anxious about germs, social life
 Low E: Does not have many friends

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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 | Altruistic | |
| Curious | Caring | |
| Cultured | Modest | |
| Imaginative | Tender | |
| Permeable | Trusting | |
| Conventional | Anxious | |
| Cautious | Angry | |
| Industrious | Depressed | |
| Orderly | Self-Conscious | |
| Responsible | Vulnerable | |
| Assertive | Gregarious | |
| Enthusiastic | Warm | |
| Energetic | | |
| | | Openness |
| | | Conscientiousness |
| | | Extraversion |
| | | Agreeableness |
| | | Neuroticism |

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

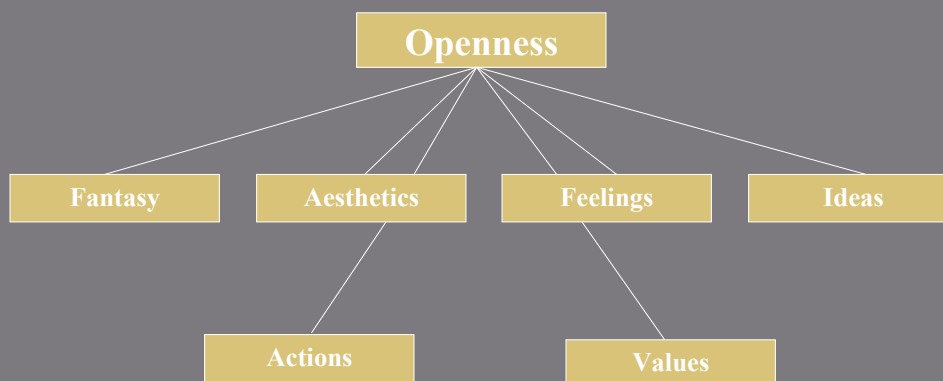


Introverted chimp

FFM: Traits have Sub-Facets

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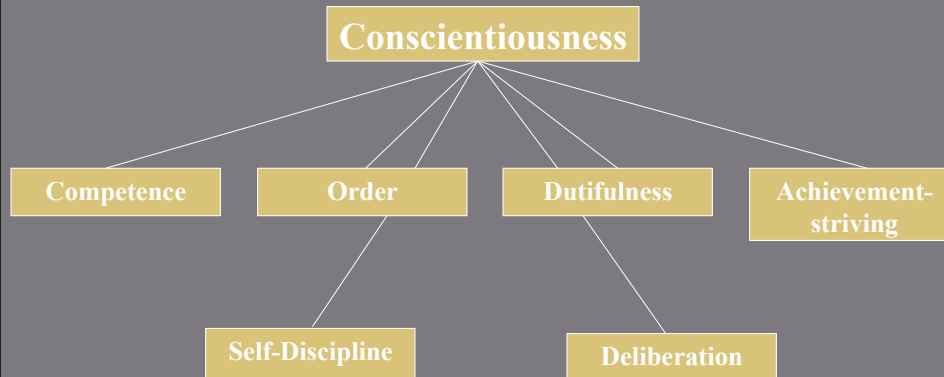
FFM: Openness to experience



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

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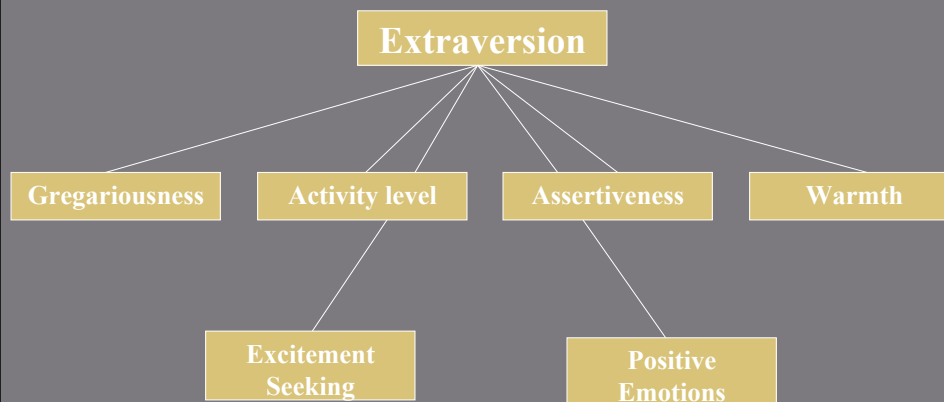
FFM: Conscientiousness



Conscientious people are successful in school and work, and have more stable, committed romantic relationships

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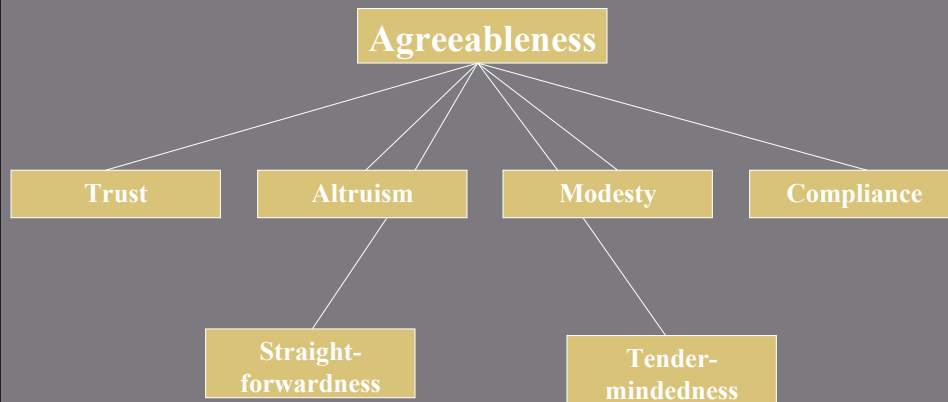
FFM: Extraversion



Extraverts love social attention and leadership, and are happier

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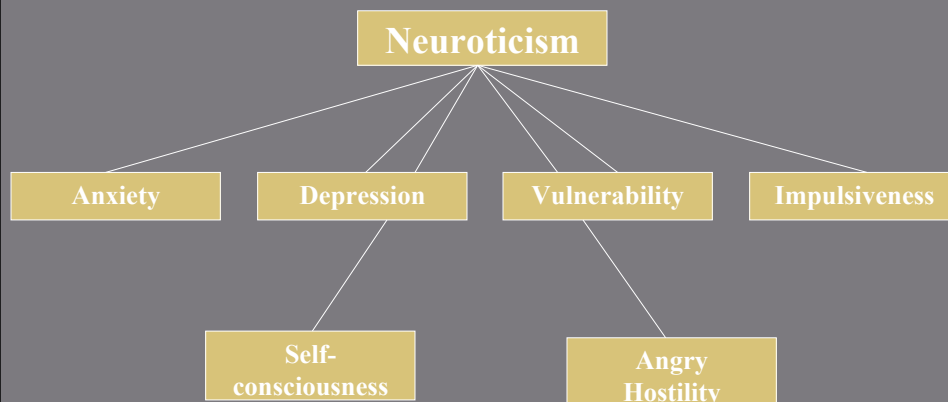
FFM: Agreeableness



Agreeable people resolve conflicts, are generous, and are well-liked

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FFM: Neuroticism

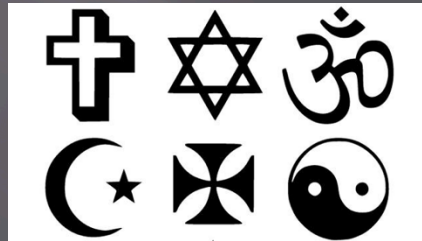


Neurotic people are highly emotional, have mood swings and instability in relationships, and are more fatigued

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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



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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: In a population, people's average level of a trait at different ages
- Are people on average more extraverted when they are younger or older?

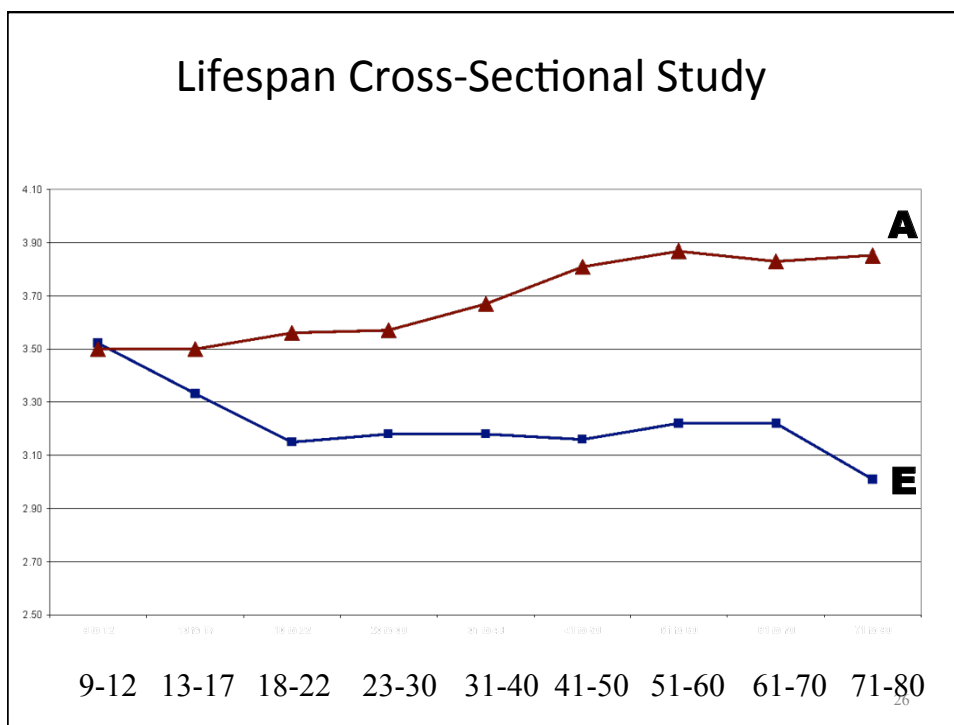
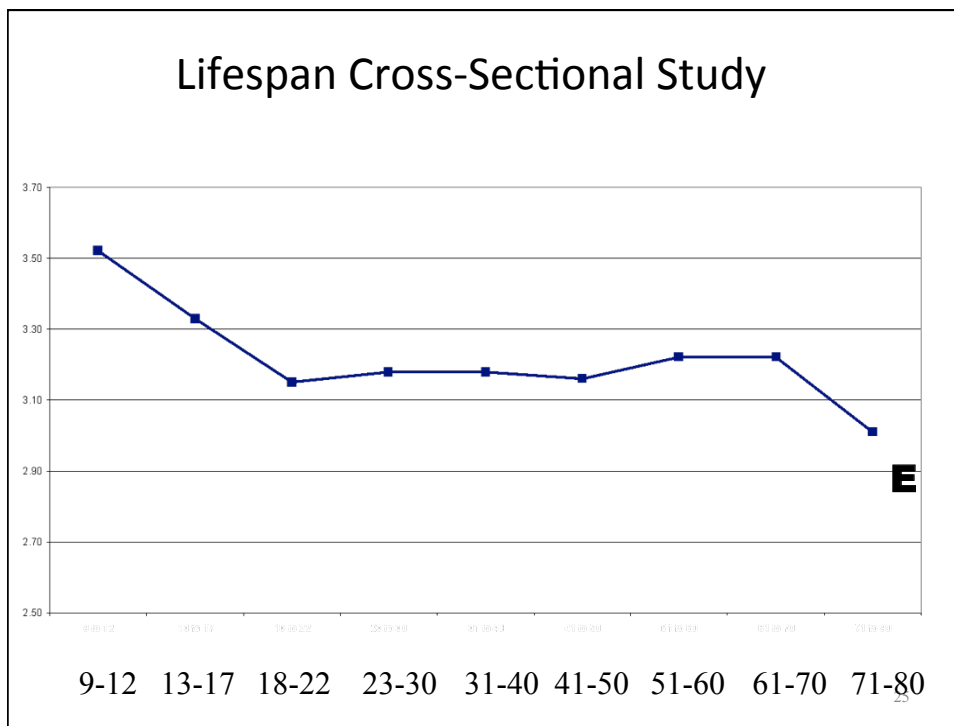


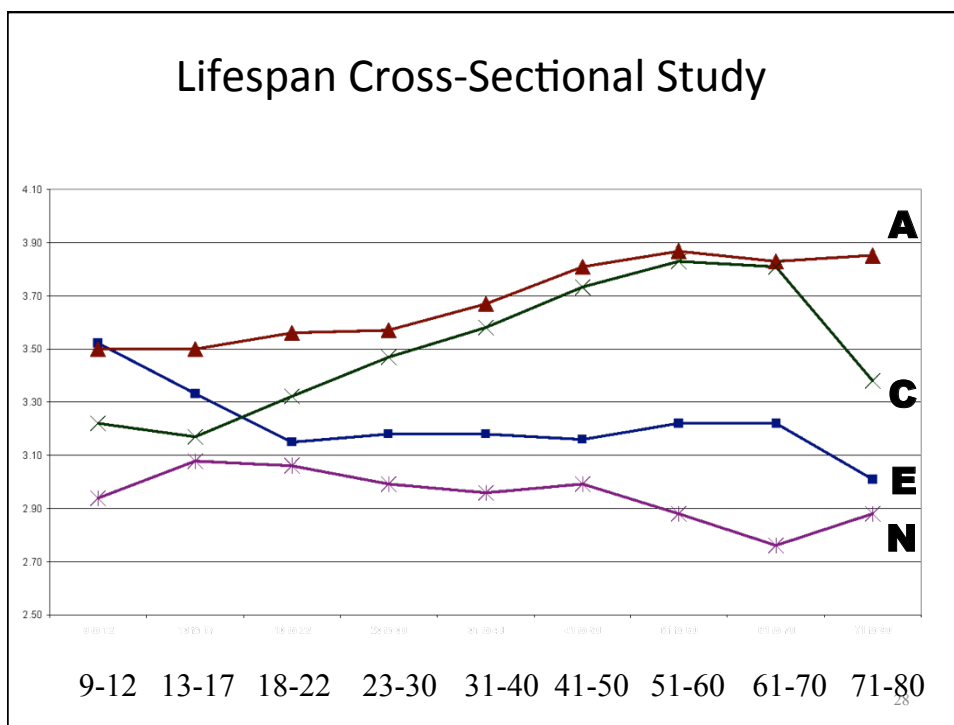
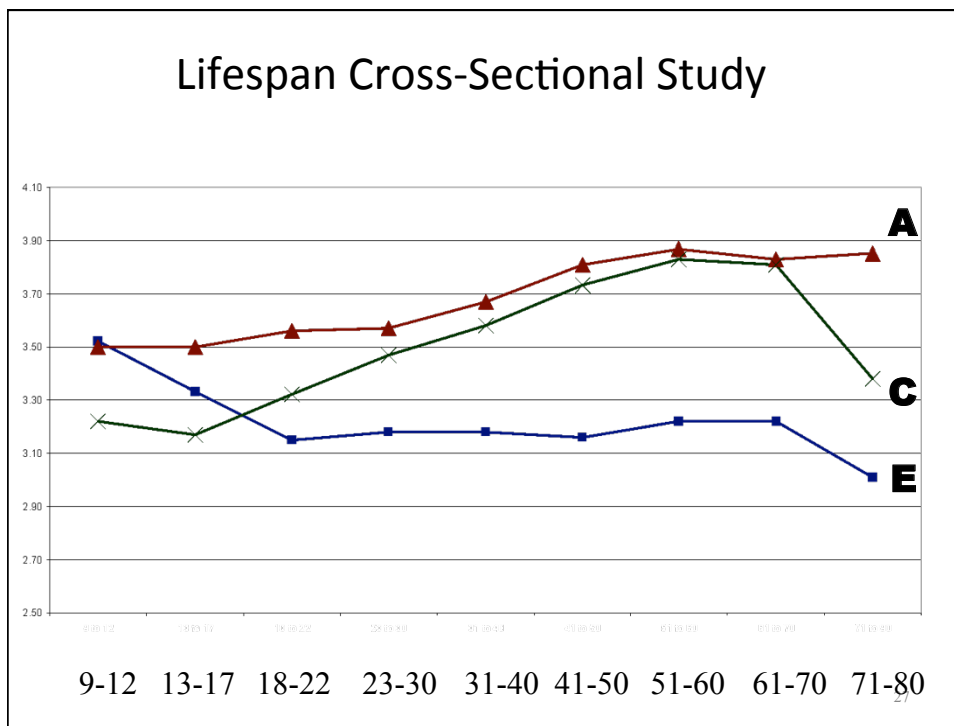
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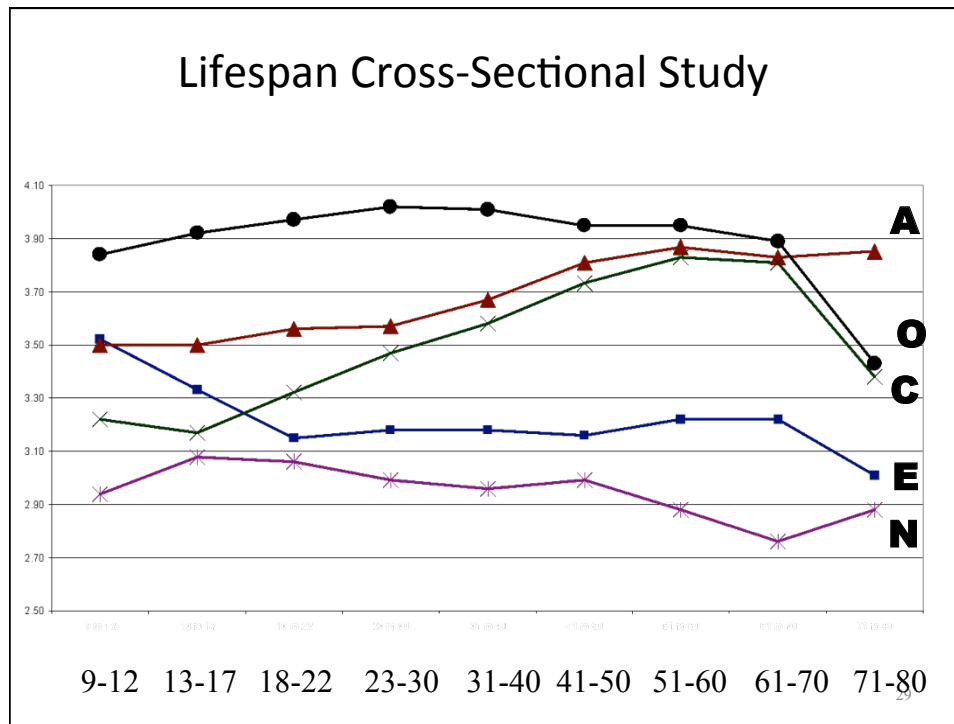
Mean Level Change Across Lifespan

- 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?

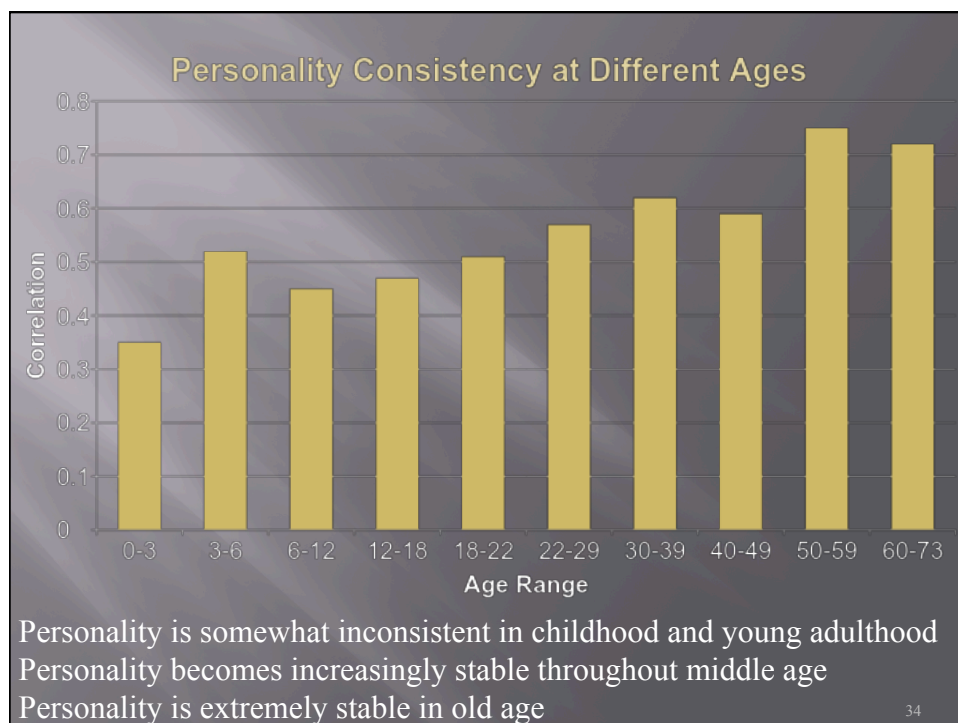
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Stability at Different Ages

■ 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



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 & 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

Hot Off the Presses!

- Borghuis et al. (Oct. 2017) "Big Five Personality Stability, Change, and Codevelopment Across Adolescence and Early Adulthood."
 - N = 2230 Dutch adolescents, followed from ~age 12 to 22.
 - Participants interviewed annually in their homes about personality and relationship quality.
 - What kind of design is this? What is the IV? What is the DV?

Hot of the Presses!

- Findings
 - 1 year rank-order stability of Big 5 traits increases up to mid-adolescence and then level out.
 - Mean-level changes moderated by gender
 - Males: +O, U shaped curve for C, stable E, +A, stable N
 - Females: -O, +C, U shaped curve for E and N, +A
 - Big individual differences in individual-trait change for E, C, and N.
 - Individual personality changes unrelated to friends and siblings.

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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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Up Next

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

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THANKS

Email: Eric.Mercadante@psych.ubc.ca
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