

# DESCRIBING PERSONALITY

# Trait approach

- Seeks to identify the structure of personality and the basic traits necessary to describe personality
- Quantitative description and comparison of people become possible
- Does not explain what causes personality

MEASURES						
	VARIABLE I SOCIABILITY	VARIABLE 2 POPULARITY	VARIABLE 3 LIVELINESS	VARIABLE 4 RISK-TAKING	VARIABLE 5 SENSATION SEEKING	VARIABLE 6 IMPULSIVITY
Variable I	1.00	.78	.82	.12	.07	03
Variable 2		1.00	.70	.08	.02	.11
Variable 3			1.00	.05	.11.	.18
Variable 4				1.00	.69	.85
Variable 5					1.00	.72
Variable 6						1,00

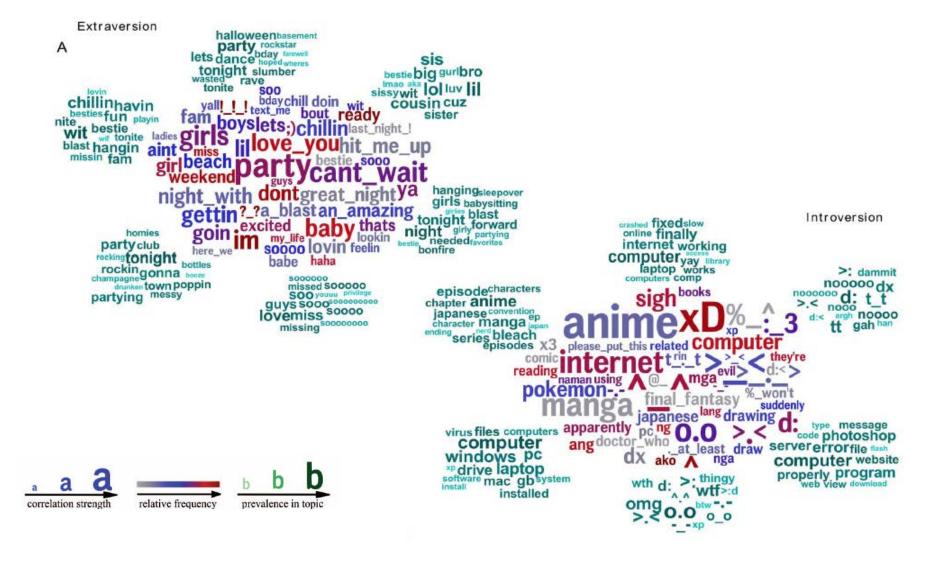
Factor analysis refers to a statistical method that identifies general patterns underlying associations among a large number of variables. With this method, researchers can identify the basic traits that underlie people's responses to personality measures.

#### The Big Five Model

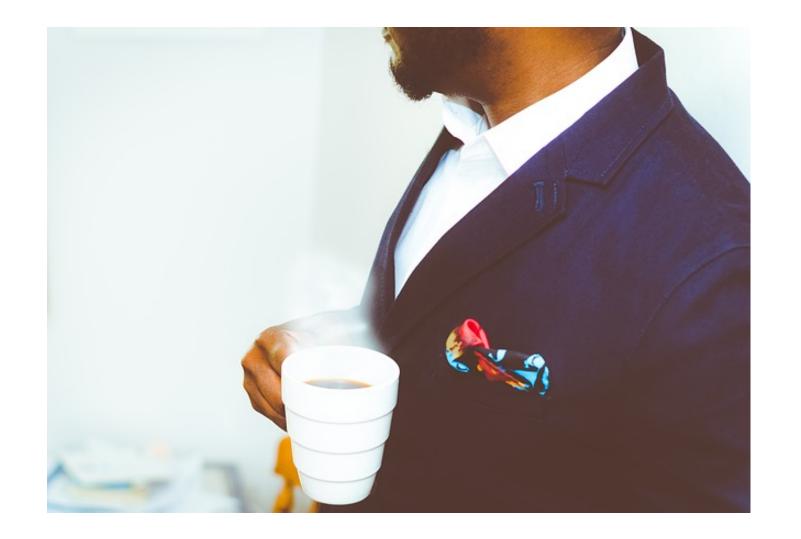
- Factor analysis of trait terms in dictionaries and works of literature reveal a five-factor structure (Costa & McCrae, 1992)
- Observed consistently across methods, populations, and cultures



The big five personality traits (OCEAN)



Based on an analysis of 700 million words, phrases, and topic instances collected from 75,000 Facebook users, researchers found that users' big traits can predict their language use on Facebook (Schwartz et al., 2013).



High conscientiousness, low neuroticism, and high agreeableness are associated with better overall performance (Tett et al., 1991). Also, extraversion seems important for salesperson (Furnham & Fudge, 2008).

Constant	.112 (.065)	.071 (.057)			
Age	033*** (.003)	033****(.003)			
Female	.045*** (.006)	.036*** (.006)			
Education	.036*** (.003)	.035*** (.003)			
Health	015*** (.003)	015*** (.003)			
Income (binned)	004 (.003)	002(.003)			
Logged confirmed cases $(t-1)$	129*** (.012)	$114^{***}$ (.012)			
Logged confirmed deaths $(t-1)$	.026 (.009)	.025 (.009)			
Estimated infections now	008(.003)	008 (.003)			
Estimated infections in one month	.013** (.003)	.013** (.003)			
Stringency index		.095*** (.009)			
Openness		.040*** (.003)			
Conscientiousness		.013*** (.003)			
Extraversion		025*** (.003)			
Agreeableness		.014*** (.003)			
Neuroticism		.019*** (.003)			
Openness × Stringency Index					
Conscientiousness × Stringency Index					
Extraversion $\times$ Stringency Index					
Agreeableness × Stringency Index	·				
Neuroticism × Stringency Index					
Observations	101,005	101,005			
Akaike information criterion	274,676.438	274,399.199			
Bayesian information criterion	274,800.236	274,580.134			
Note. p values are Dunn-Bonferroni corrected.					
** $p < .001$ . *** $p < .0001$ (following Benjamin et al., 2018).					
Openness, conscientiousness, agreeableness, and neuroticism all predicted					
higher rates of sheltering-in-place during the pandemic, whereas					
extraversion was negatively related to staying at home (Götz et al., 2021).					

Model 1

Model 2

Predictors

# PERSONALITY ASSESSMENT

- Personality assessment
  - Reliability: consistency of a measurement (e.g., test-retest reliability)
  - Validity: extent to which a measure assesses what it purports to measure

# Structured personality tests

- Tests in which respondents answer questions in one of a few fixed ways
- Vary in length and number of traits measured
- Objective, easy to administer, allowing quantification and comparison

	Disagree moderately		Neither agree nor disagree		Agree moderately	Agree strongly
1	2	3	4	5	6	7

#### I see myself as:

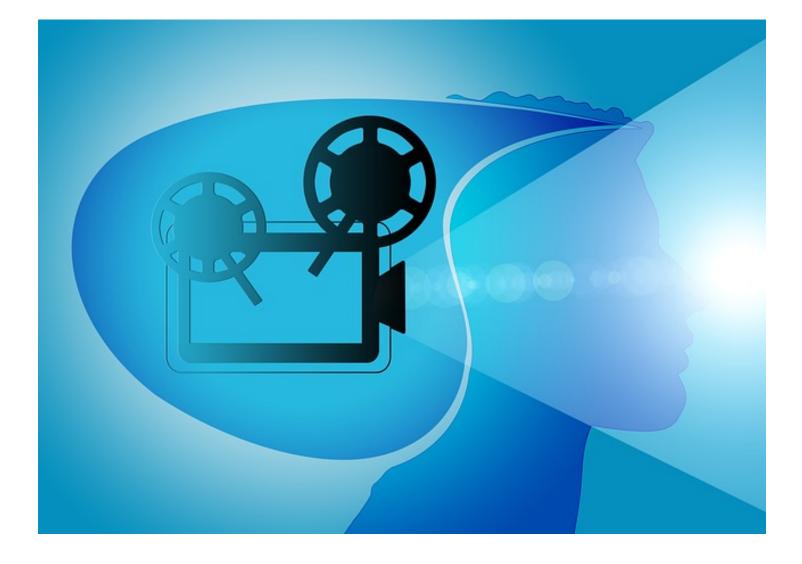
- 1. \_\_\_\_ Extraverted, enthusiastic.
- 2. \_\_\_\_ Critical, quarrelsome.
- 3. \_\_\_\_ Dependable, self-disciplined.
- 4. \_\_\_\_ Anxious, easily upset.
- 5. \_\_\_\_ Open to new experiences, complex.
- 6. \_\_\_\_\_ Reserved, quiet.
- 7. \_\_\_\_ Sympathetic, warm.
- 8. \_\_\_\_ Disorganized, careless.
- 9. \_\_\_\_ Calm, emotionally stable.
- 10. \_\_\_\_ Conventional, uncreative.

TIPI scale scoring ("R" denotes reverse-scored items): Extraversion: 1, 6R; Agreeableness: 2R, 7; Conscientiousness; 3, 8R; Emotional Stability: 4R, 9; Openness to Experiences: 5, 10R.

A brief measure of the big five personality traits (Gosling et al., 2003)

#### Projective tests

- Tests in which the test taker is asked to interpret some ambiguous stimuli
- A few tests (e.g., sentence completion tests) achieve satisfactory reliability and validity (Lilienfeld et al., 2015)



The projective hypothesis (Frank, 1949): "to obtain from the test taker, 'what he cannot or will not say,' frequently because he does not know himself and is not aware what he is revealing about himself through his projections."

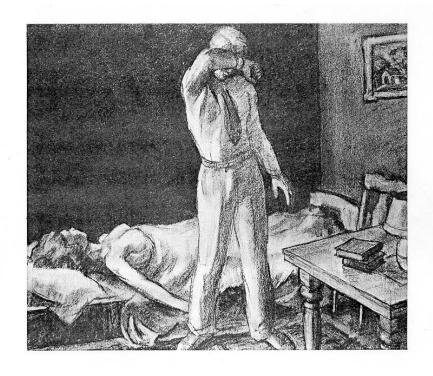


Rorschach Test. Test-takers are shown a series of symmetrical inkblots and asked to tell what each inkblot might be.

RORSCHACH SCORE	SAMPLE RESPONSE	TYPICAL INTERPRETATION
Pair response	"I see two dogs looking at each other."	Self-centeredness
Unusual detail response	"On the very top of the blot, I see a little heart-shaped thing."	Obsessive-compulsive tendencies
Space response	"That white area in the lower middle sort of looks like the head of an alien."	Rebelliousness, anger
Human movement response	"The right upper part of the blot looks like a man bending his head forward."	Impulse control, inhibition

The test is scientifically controversial: reliability is unknown and problematic; evidence for its validity for psychiatric diagnoses is lacking (Lilienfeld et al., 2015).





"I am going to show you some pictures, one at a time; and your task will be to make up as dramatic a story as you can for each. Tell what has led up to the event shown in the picture, describe what is happening at the moment, what the characters are feeling and thinking; and then five the outcome. Speak your thoughts as they come to your mind."

#### Affiliation arousal

George is an engineer who is working late. He is worried that his wife will be annoyed with him for neglecting her. She has been objecting that he cares more about his work than his wife and family. He seems unable to satisfy both his boss and his wife, but he loves her very much and will do his best to finish up fast and get home to her.

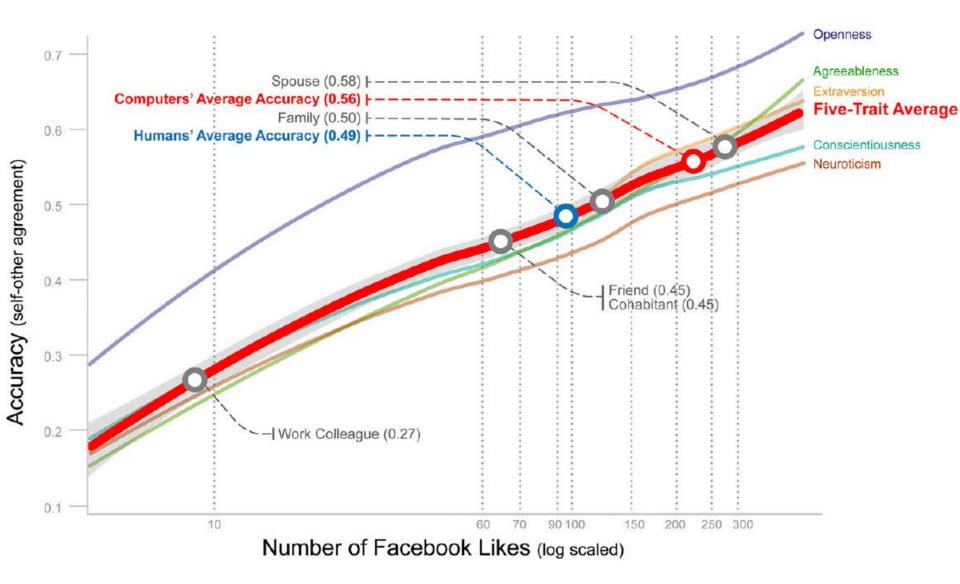


#### Achievement arousal

George is an engineer who wants to win a competition in which the man with the most practicable drawing will be awarded the contract to build a bridge. He is taking a moment to think how happy he will be if he wins. He has been baffled by how to make such a long span strong, but he remembers to specify a new steel alloy of great strength, submits his entry, but does not win, and is very unhappy.

Sample interpretations of responses. Impressionistic interpretations do not show strong reliability or validity (Lilienfeld et al., 2001).

- Computer-based assessment
  - Automatic judgments of a person's personality through analyses of his/her digital footprint (Park et al., 2015)



The accuracy of an average human's judgment (r = 0.49) is matched by that of the computer model based on just around 90–100 Facebook Likes ( $\frac{1}{20}$ ).