Personality comes from the Greek (by way of Latin): per + sonare = to speak through the mask. (Greek actors wore masks on stage to portray characters).

Schacter 2017 defines personality as an individual’s characteristic style of behaving, thinking and feeling. Note how difficult it is to measure the last two qualities.

There are four main approaches to the study of personality: biological; psychodynamic; humanistic-existential; social-cognitive.

This class prefers the neuroscientific approach, which begins by asking the question: “What is a self?”

What we are all looking for is an explanation of differences among people.

Measuring Personality

A **self-report** is defined as a questionnaire method in which a person provides subjective information about his/hers thoughts, feelings and behaviors. (Link this to phenomenological assessment.)

The most common method of personality assessment is the self-report. The self-report scale is created by collecting sets of self-descriptive statements that indicate different degrees of a personality characteristic, such as ‘friendliness’.

A good example is the Ten Item Personality Inventory (**TIPI**) (Gosling, Rentfrow & Swann, 2003)

Adding up the number of statements the person endorses that indicate ‘friendliness’ and subtracting those statements that indicate ‘unfriendliness’ will yield a measure of the person’s self-reported friendliness.

Such scales are: (1) overall happiness (Lyubomirsky, 2008); rapid response to insults (Swann & Bentfrow, 2001).
Minnesota Multiphasic Personality Inventory

This is the premier personality assessment tool; its present form is the MMPI-2-RF.

The MMPI-2-RF consists of 338 self-descriptive statements to which the respondent answers “true, false, cannot say”.

The MMPI-2-RF measures a wide range of psychological constructs, clinical problems (for example, antisocial behaviour, thought dysfunction), somatic (body) problems such as head pains, internalizing problems such as anxiety or self-doubt, externalizing problems (aggression, substance abuse), and interpersonal problems (family problems, avoidance).

The MMPI-2-RF also includes a validity scale that measures a person’s attitudes towards test-taking and any tendency to distort the results by faking answers.

The MMPI-2-RF is analyzed based on empirical criterion keying; that means measuring this individual score against hundreds of thousands of tests in a database. For example, the MMPI-2-RF scores will measured against incarcerated criminals, and conversely medical professionals. This approach--measuring against real-world cases--is what gives the MMPI-2-RF its construct validity. Note: google “define: construct validity” to understand the importance of the term.

Accurate measurement of personality will only occur if people provide accurate responses. Many people have a tendency to respond in a socially desirable way (demand characteristics), others have aspects of themselves they know nothing about, they may be inaccurate about past experiences, or what factors are motivating their behaviour in the present (Wilson, 2009).
Thematic Apperception Test

Projective tests are designed to reveal inner aspects of individual’s personalities by analysis of their responses to a standard series of ambiguous stimuli.

The Rorschach Inkblot Test is a projective technique in which respondents’ inner thoughts and feelings are believed to be revealed by analysis of their responses to a set of unstructured inkblots.

The Thematic Apperception Test is a projective technique in which the person’s underlying motives, concerns, and the way they see the social world are believed to be revealed through analysis of the stories they make up about ambiguous pictures of people interacting.

Although they continue to be used by practising clinicians, critics argue that the TAT are open to the biases of the examiner; that is they may ‘read into’ or ‘project onto’ the test results their own beliefs and projections. Therefore, these tests should be understood primarily as a way in which psychologists can ‘break the ice’ in counselling (McClelland et al., 1953). When measured by rigorous scientific criteria, the TAT have not been found to be reliable or valid in predicting behaviour. (Lilienfeld, Lynn & Lohr, 2003).

Methods Using Technology

Enter internet-age technologies. Are women actually more talkative than men? Wireless communication, real-time computer analysis and automation lead to surprising findings. Mehl et al., 2009 reported that 396 university students in the U.S. and Mexico each spent several days wearing an electronically activated recorder (EAR) and found that both men and woman averaged 16,000 words a day equally.
Traits as Behavioural Dispositions and Motives

A trait is a relatively stable disposition to behave in a particular and consistent way. Gordon Allport (1937) saw traits as pre-existing dispositions, causes of behaviour that reliably trigger that behaviour. Murray (creator of the TAT) suggested that traits reflect motives. Some of the traits that have been heavily researched are authoritarianism, cognitive complexity, defensiveness, sensation seeking, and optimism.

What are the core traits? To identify these, factor analysis is used. Many terms for traits can be reduced into a small number of underlying dimensions, or factors. To understand factor analysis, try answering this question: “Which sport is more difficult, hockey or soccer?”

Study Fig 12.3 Eysenck’s Hierarchical Structure of Traits for the next exam

Example: Sensitive to Feedback: dejected when a friend cancels dinner plans; elated when a stranger returns a smile; ashamed after receive a poor work evaluation.

<table>
<thead>
<tr>
<th>Neuroticism</th>
<th>Anxious</th>
<th>Low self-esteem</th>
<th>Moody</th>
<th>Shy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cries easily</td>
<td>Sensitive to feedback</td>
<td>Quick to anger</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Big Five Factor Model

<table>
<thead>
<tr>
<th>Personality Dimension</th>
<th>High Characteristics</th>
<th>Low Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness to experience</td>
<td>Imaginative; Variety; Independent</td>
<td>Down-to-earth; Routine; Conforming</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Organized; Careful; Self-disciplined</td>
<td>Disorganized; Careless; Weak-willed</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Social; Fun-loving; Affectionate</td>
<td>Retiring; Sober; Reserved</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Soft-hearted; Trusting; Helpful</td>
<td>Ruthless, Suspicious; Uncooperative</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>Worried; Insecure; Self-pitying</td>
<td>Calm; Secure; Self-satisfied</td>
</tr>
</tbody>
</table>

The Big Five dimensions are so universal that they show up even when people are asked to evaluate complete strangers (Passini & Norman, 1966). The reality of these traits has been clearly established: people high in extraversion choose to spend time with other people; people high in conscientiousness generally perform well at work and live longer; people low in conscientiousness are more likely than average to be juvenile delinquents. (John & Srivastava, 1999).
Brain and Personality

When someone experiences a profound change in personality, testing often reveals the presence of brain pathologies such as stroke, brain tumour, or changes consistent with dementia (Feinberg, 2001). The administration of antidepressant medication and other pharmaceutical treatments that can change brain chemistry can also trigger personality changes, making people somewhat more extraverted and less neurotic (Bagby et al., 1999).

In one review of studies involving over 24,000 twin pairs, identical twins proved markedly more similar to each other in personality than did fraternal twins. (Loehlin, 1992). Heritability coefficients indicate that roughly half of the variability among individuals results from genetic factors (Bouchard & Loehlin, 2001).

Heritability Estimates for the Big Five Personality Traits

<table>
<thead>
<tr>
<th>Trait Dimension</th>
<th>Heritability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>0.45</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.38</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.49</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.35</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.41</td>
</tr>
<tr>
<td>Source</td>
<td>Loehlin, 1992</td>
</tr>
</tbody>
</table>


Gender Differences in Personality

Examples: Males are more physically aggressive than females, but females engage in more relational aggression than do males, even from a very young age (Crick & Grotpeter, 1995).

On the Big Five, studies across dozens of cultures around the world show that women are higher on neuroticism, extraversion, agreeableness, and conscientiousness; in terms of openness, women report more to feelings and men to ideas. (Schmitt et al., 2008). Overall, however men and women are far more similar in personality than they are different. (Hyde, 2005).

Genetics and Personality

Can genetics predict specific behaviours? Martin et al., 1986 examined 3000 pairs of identical and fraternal twins and found genetic evidence for transmission of conservative views on socialism, church authority, the death penalty, and mixed-race marriage. A set of interacting genes is the likely culprit.

Hatemi et al, 211 reported that after examining the DNA of 13,000 people found associations between conservative/liberal and the chromosomal regions linked to mental flexibility.

Are traits hard-wired in our brains? Hans Eysenck suggested that extraverts pursue stimulation because their reticular formation is not easily aroused. To feel greater cortical arousal, extraverts seek out more social interaction. In contrast, introverts prefer quiet activities like reading because their cortex is more easily stimulated to optimal arousal.

It boils down to concentration. Extraverts tend to perform well at tasks that are done in a noisy, arousing context, whereas introverts are better at tasks that require concentration in tranquil contexts.

Jeffrey Grey proposed the dimensions of extraversion-introversion and neuroticism reflect two basic brain systems: (1) a behavioral activation system; (2) a behavioral inhibition system. Studies of brain electrical activity (quantitative EEG) and functional brain imaging (fMRI) that the individual differences in activation and inhibition arise from the interaction of these two systems. (DeYoung & Grey, 2009).

Also, the volume of a brain region may correlate to the particular self-reported personality trait. For instance, self-reported neuroticism is correlated with brain regions involved with sensitivity to threat. (DeYoung et al., 2010)
Freud and the Psychodynamic Approach

Freud used the term psychodynamics to refer to both his theory of personality and his method of treating patients. To understand stand this, one must grasp Freud's theory of the structure of the mind.

Id (Latin for 'it'): the part of the mind containing the drives present at birth, the source of our bodily needs, wants, desires, and impulses. Freud focused on sexual and aggressive drives.

Superego: the mental system that reflects the internalization of our cultural rules, mainly learned from our parents. This 'moral center' appears to have a structural reality in our brains, located just above the left eyebrow.

Ego: the component of personality, developed through contact with the external world, that enables us to deal with life's practical demands.

Table 12.4 Defense Mechanisms will be on the midterm as many of the concepts have stood the test of time. A good example is projection.

Freud proposed that human development is divided into five psychosexual stages: (1) oral; (2) anal; (3) phallic; (4) latency; (5) genital. On one hand, the psychoanalytic theory of these stages offers an intriguing picture of early family relationships; critics argue that these stages lack any real evidence.
The Humanistic-Existential Approach

Abraham Maslow proposed that humans have a self-actualizing tendency, a motive toward realizing our full potential. He proposed a hierarchy of needs; an example is the need for nourishment and physical safety as an infant, which must occur before self-esteem. A quest for enlightenment (based on the highest values of a particular culture) would occur after a person has fulfilled their self-esteem needs through practical accomplishments.

Research indicates that when people shape their lives around goals that do not match their true nature and capabilities, they are less likely to be happy (self-report again) than those who do. (Ryan & Deci, 2000).

Social-Cognitive Approach

This approach views personality in terms of how the person thinks about situations occurring in everyday life and their behavior in response to them. At the core of the social-cognitive approach is a natural puzzle, the person-situation controversy, which focuses on the question of whether behavior is caused by personality or by situational factors. Walter Mischel proposed this when he stated that measured personality traits often do a poor job of predicting an individual's behavior. This is demonstrated by the 1928 Hartshorne and May study that assessed children's honesty by their reported willingness to cheat on a test. They found that such dishonesty was not consistent from one situation to another.

Table 12.6 (Locus of Control) was Rotter's solution to the personality-situation problem. Outcome expectancies combine with a person's goals to produce their characteristic style of behavior. People with an internal locus of control tend to be less anxious and achieve more. (Lefcourt, 1982).

Mischel's approach nearly put an end to personality psychology. Neuroscience came to the rescue.
Self-Concept in the Brain

Self-relevance occurs when those traits people use to judge themselves stick in memory. When people make judgments of themselves on traits, they later recall these traits better than when they judge other people on the same traits. (Rogers, Kuiper & Kirker, 1977).

In studies of the this effect of self-relevance on memory, researchers using brain imaging techniques have found that the simple activity of making judgments about the trait self-concept is accompanied by the activation of the **medial prefrontal cortex**. (Figure 12.5)

Self-Esteem

Self-esteem is the extent to which an individual likes, values or accepts the self. Rosenberg's Self-Esteem Scale is another self-report focused on an individual's self-esteem. What is problematic about self-esteem is **self-serving bias**, that is, people tend to take credit for their successes, but downplay responsibility for their failures. (Shepperd, Malone & Sweeney, 2008)