# Exploring Psychological Approaches PSY\_4\_EPA

Lecture 9
What makes us different from one another?

#### Outline

- ? This week we will focus on several aspects of individual differences WHAT we differ on, and WHY.
- ? Next week we will look at measuring differences - more WHY and HOW













## Psychology and ways in which we differ





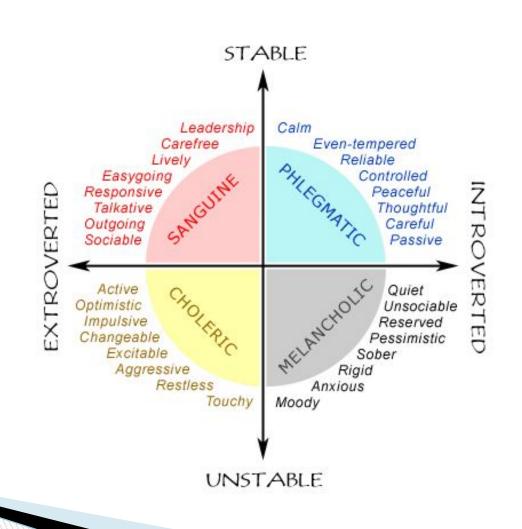
- ? A great deal of what you may have learned about so far focuses on similarities in behaviour, or how groups of people will behave
- ? One important aspect of psychology is Individual Differences, or ways in which we differ
- ? The main psychological characteristics that relate to Individual Differences are:
  - Personality
  - Intelligence
- ? We will also briefly examine:
  - Attachment
  - **Atypical**

# Why are we interested in Personality?



- ? To explain the motivational basis of behaviour
- ? To provide descriptions/categorizations of how individuals behave
- ? To understand how personality develops
- ? To be able to develop interventions for behaviour change

#### Hippocrates, Galen, Eysenck 450BC 160AD 1973



# What do we mean by the term "personality"?



#### A COLLECTION OF

**Thoughts Emotions Description** 

Perceptions Talents Behaviours Attitudes

**Habits** Values Beliefs

? Think about two people that you know that have different personalities

NOT

http://www.youtube.com/watch?v=MhX nXTF0Ec&playnext=1&list=PL316DEF5B261A5519

### **Definitions of Personality**



Burger, 2004: "Personality can be defined as consistent behaviour patterns and intrapersonal processes originating within the individual."

Allport, 1961: "Personality is the dynamic organization, within the person, of psychophysical systems that create the person's characteristic patterns of behaviour, thoughts and feelings".



### **Approaches to Personality**



- Researchers have taken many different approaches to describe and attempt to explain personality
  - Trait approach the focus for today (Eysenck, Cattell)
  - Psychodynamic approach (Freud) -unconscious, internal conflicts.
     The dynamics of this conflict through early stages of development can determine an individual's personality in adulthood.
  - Humanistic approach, (Maslow, Rogers) five basic beliefs: humans supersede the sum of their parts, existence is a uniquely human context, are aware of being aware (conscious), free will, intentional goals.
  - Situational approach (Bandura) role of social learning, Modelling
     & Reinforcement.

#### **Trait Approach**



#### What is a trait?

- "relatively stable disposition to behave in a particular and consistent way" (Schacter et al., 2012, p. 493).
- ? Gordon Allport (1937) —personality can be understood as a combination of <u>traits</u>
- ? Are the personalities of the two people, one with a tidy desk, one with an untidy one, likely to be different?
- ? Trait theorists include Galton, Allport, Cattell, Eysenck and Costa & McCrae

### Trait approach to personality



? Personality characteristics are relatively stable.

? Traits show stability over time.

? Aims to find the basic "structure" of personality.

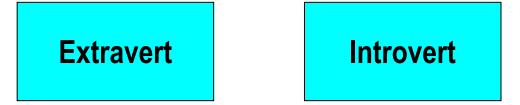
? Aims to find ways of measuring personality.

### Type vs. Trait

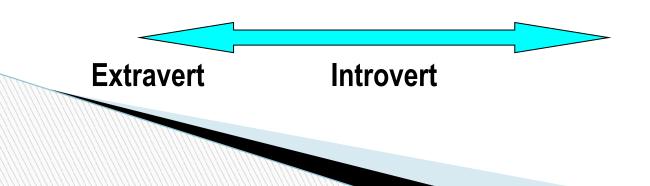


**Early type theories:** distinct and discontinuous categories (e.g. sex – either male or female).

Jung described Extraversion-Introversion as discontinuous (first person to mention E & I).



**Trait theories:** dimensional approach; assume people differ along continuous variables or dimensions.



### Identification of important traits | 1111





#### **Lexical Approach**

Starts with lexical hypothesis. All important individual differences have become encoded within the natural language over time. Good starting point for identifying important individual differences, however not the only approach used.

#### Statistical Approach (Factor Analysis)

Starts with a large pool of items. Goal is to identify major dimensions of personality.

Most researchers using lexical approach turn to statistical approach to distil ratings of trait adjectives into basic categories of traits.

### Eysenck's hierarchical model of personality



- Supertrait (superfactor) e.g. extravert (ENP)
- 1. **Traits** (factor) *e.g. degree of sociability*
- 1. Habits e.g. liking for lively social events
- 1. **Specific behaviours** *e.g.* socialising with friends at the end-of-term party

### **Eysenck's Supertraits**



2 supertraits as underlying dimensions of personality:

Introversion – Extraversion (E) Emotionality – Stability (Neuroticism-N)

Eysenck Personality Questionnaire – EPQ (1975)

Eysenck later added a further dimension (EPQ-R, 1982):

**Psychoticism (P)** psychological detachment from others – NOT psychotic.

#### Eysenck's Supertraits Eysenck & Eysenck (1985)



#### **Traits that make up Extraversion:**

Sociable, sensation-seeking, lively, carefree, dominant, active, assertive, surgent, venturesome

#### **Traits that make up Neuroticism:**

Tense, anxious, irrational, depressed, guilt feelings, shy, moody, low self-esteem, emotional

#### Traits that make up Psychoticism:

Impulsive, aggressive, unemphatic, cold, egocentric, creative, impersonal, antisocial, tough-minded

# **Biological Basis for Eysenck's Personality Dimensions?**





#### ? Extraversion – Introversion:

 Ascending reticular activating system (ARAS). Introverts have higher base arousal levels, they are easily overaroused. Extraverts have lower base levels, they seek stimulation to bring their arousal up.

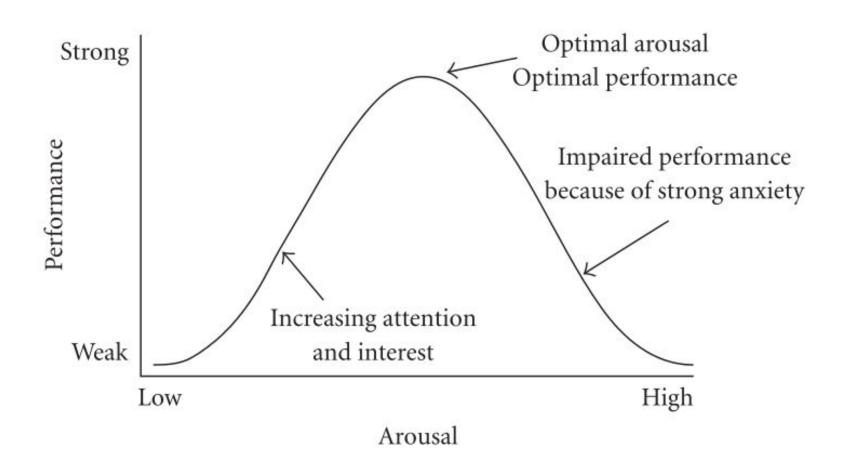
#### ? Neuroticism:

Sympathetic nervous system. Some people have more responsive SNS than others (e.g. some remain calm during emergencies, some feel fear and some are terrified). People who score high on N scale are not necessarily neurotics – they are more prone to neurotic problems (e.g. panic attacks).

#### ? Psychoticism:

Androgen/testosterone levels...less researched

## Hebb's version of Yerkes-Dodson law



# The Big Five Dimensions of Personality



- Researchers have proposed theories of personality with a variety of number of dimensions
  - Cattell (1950) 16-factor theory of personality
  - Eysenck (1967) originally two, then revised to three supertraits
- Today many researchers agree that there are 5 main factors that capture what we mean by personality
- ? Costa & McCrae (1992) "Five Factor Model"
  - Openness
  - Conscientiousness
  - Extraversion
  - Agreeableness
  - Neuroticism

(Memory aid – try to remember OCEAN)

Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Fantasy	Competence	Warmth	Trust	Anxiety
Aesthetics	Order	Gregariousness	Straightforwardness	Angry hostility
Feelings	Dutifulness	Assertiveness	Altruism	Depressions
Actions	Achievement striving	Activity	Compliance	Self-consciousness
ldeas	Self-discipline	Excitement seeking	Modesty	Impulsiveness
Values	Deliberation	Positive emotions	Tender-mindedness	Vulnerability

Source: Costa and McCrae (1985)

# The Big Five Dimensions of Personality



- Pig Five Personality traits have been found to be present:
  - In children
  - Across cultures
  - In different languages
  - Over time
- Basic review video

### What is Intelligence?





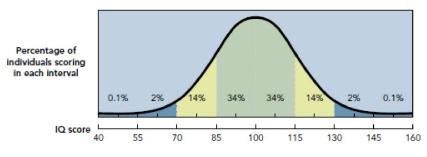
- ? Innate, general cognitive ability (g)?
  - Spearman (1927)
- ? A collection of skills, e.g. reasoning, problem-solving, spatial, verbal & social skills?
- ? Whatever intelligence/IQ tests measure?
- ? Depends who you ask.....

### What is Intelligence?





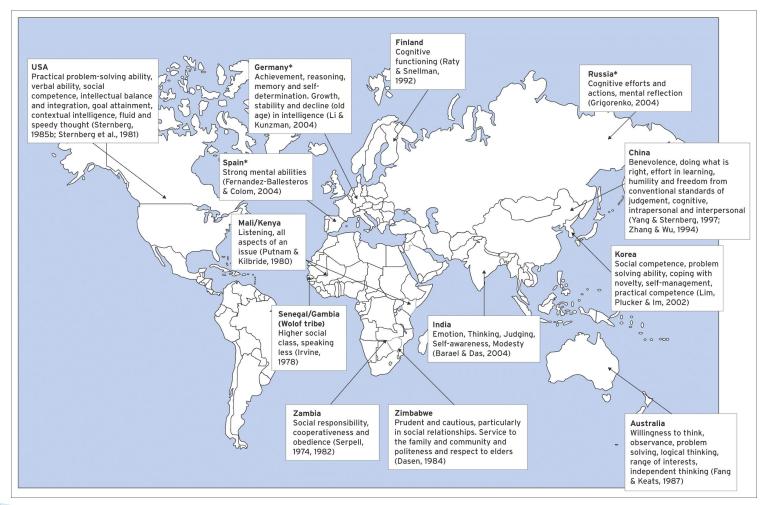
- ? Do behaviours that reflect intelligence change with age, culture... and circumstance?
- ? What traits do you think characterise an intelligent...
  - 6-month-old?
  - 2-year-old?
  - University student?
  - 60-year-old?
- ? Think about how we differ in intelligence



### Implicit Theories of Intelligence Countries Around the World







Implicit theories of intelligence by countries around the world

## **Early Influences: Francis Galton**





- ? Cousin of Charles Darwin
- Measured psychophysical abilities (e.g. reaction times, which directly correlates to IQ by the way...why?)
- ? Argued that intelligence was largely hereditary
  - Found 100 men of 'genius' who possessed
  - "the reputation of a leader of opinion, or an originator, of a man to whom the world deliberately acknowledges itself largely indebted".
  - They could all be traced to 300 families, and Galton concluded that "there is no escape from the conclusion that nature prevails enormously over nurture"
- Any problems with Galton's conclusions?

## **Early Influences : Alfred Binet**





- ? The "father" of IQ testing, he employed Piaget!
- Attempts to measure a person's Intelligence Quotient (IQ) first started in 1905 when the French Government asked Binet & Simon to devise tests which would identify mentally retarded children as young as possible, in order to give them access to remedial teaching.
- Measured performance on tasks related to every day problems of life, e.g. naming objects in a picture, digit span, word definition
- ? All tasks involve basic processes of reasoning?

### Theories of Intelligence





- ? Charles Spearman (1927) was one of the first psychologists to try to develop a <u>theory</u> or <u>model</u> of intelligence.
- Used factor analysis to examine relationships between scores on different tests or sub-tests of intelligence
- ? Spearman tested a large number of children on several measures, e.g. vocabulary, maths, spatial abilities.
- Spearman found correlations on his tasks, i.e. people who do well on some intelligence tests also do well on others "Positive Manifold". If people did poorly on one test, they also tended to do poorly on other intellectual tests.

# Spearman's two-factor theory



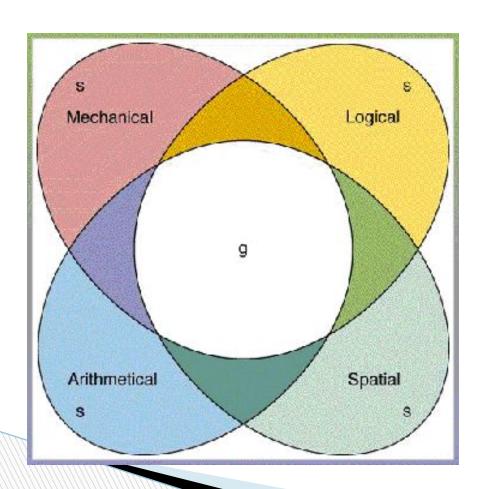


- ? specific abilities 's'
  - A factor of intelligence specific to a particular task, e.g. mathematical intelligence, spatial intelligence
- general ability 'g'
  - A factor of intelligence common to all intellectual tasks, 'mental energy', underlies the positive correlations
- 2 Spearman claimed that intelligence is mainly made up of 'g', with bright people having a lot, and dull people having less. People would also vary according to their specific abilities, 's', i.e. one person might be better at maths, while another would be very good verbally.

# Spearman's two-factor theory







According to Spearman, the most important information about someone's intellectual ability is an estimate or measurement of 'g'.

'g' is still a widely supported concept

# Is Intelligence general or specific?





- Proad agreement that there is a general component of intelligence, but the debate continues
- ? Spearman (1927) both, but 'g' much more important
- ? Thurstone (1938) claimed 'g' resulted from 7 distinct primary mental abilities (PMA: Verbal comprehension, Verbal fluency, Reasoning, Spatial visualisation, Number, Memory, Perceptual speed)
- ? Cattell (1971) claimed 'g' consisted of 2 related, but distinct components - fluid and crystallised intelligence

### Multiple Intelligences

- ? Different proponents of multiple intelligence do not agree on the possible facets.
- ? Gardeners theory (1983) seven forms of intelligence.
  - Linguistic, Musical, Spatial, Bodily, Interpersonal, Intrapersonal & Logico-mathmatical.
- ? Encompasses biological aspects & higher levels of creativity.

### ? Li (1996) summarizes Gardner's theory as follows:

- Premise 1: If it can be found that certain brain parts can distinctively map with certain cognitive functioning (A), then that cognitive functioning can be isolated as one candidate of multiple intelligences (B). (If A, then B).
- Premise 2: Now it has been found that certain brain parts do distinctively map with certain cognitive functioning, as evidenced by certain brain damage leading to loss of certain cognitive function. (Evidence of A).
   Conclusion: Therefore, multiple intelligences. (Therefore B.). (p. 34)

### Sternberg's theory 1985

- ? Triarchic theory of intelligence. Viewed other theories not as incorrect but incomplete as they neglect social and contextual factors.
- ? Analytic intelligence
- ? Practical intelligence
  - Evidence for the above in street children in Brazil (Carraher & Schliemann 1985).
- ? Creative intelligence
- ? Review Video

# Individual differences in emotion







- ? One of the other ways in which we differ is emotion and motivation
- ? Here we will briefly look at an emotional relationship attachment
  - The strong emotional tie that a person feels towards certain 'special' people in their lives.
  - Characterised by "mutual affection and a desire to maintain proximity." (Shaffer, 1993).
  - Note that an attachment is thus a <u>two-way</u> relationship.

### Theories of Attachment



- ? Explaining why attachment occurs (the meaning of 'theory' here is to try to offer an explanation for why something happens)
- Psychodynamic approach proposes that as children we form attachments to whoever fulfills our basic needs (e.g. hunger)
- ? Behaviourist approach claims that attachment is a a conditioned response, the caregiver being a conditioned reinforcer.
- Poth approaches are '**Drive Reduction**' theories because they argue that the child becomes attached to a person *because* that person reduces primary drives such as hunger, thirst, etc.

### Theories of Attachment

- ? But there are problems with drive reduction theories of attachment:
  - Infants become attached to people who don't feed/soothe them (so primary drives are not necessarily reduced)
  - Harlow's work on separation with infant monkeys (e.g. Harlow & Zimmerman, 1959) demonstrated that comfort was more important than feeding
  - Ethics Do you think that Harlow's work on infant monkey's (mostly conducted in the 1950s & 1960s) would be allowed today?
  - Refrigerator mothers.....chillingly wrong!
     Kanner, 1943.

# **Bowlby's Theory of Attachment**







- ? John Bowlby proposed what is still a very influential theory of attachment
- ? He argued that attachment itself is an innate <u>primary</u> drive
- ? Attachment has evolved as a response which promotes infant survival.
- Infants are equipped with 'proximity maintaining behaviours', e.g., crying, grasping, smiling.
- Infants show monotropy forming a strong attachment to one main person.
- ? Attachment develops gradually, but there is a critical period of around 2 years.

# What about ways in which we differ that go beyond the 'normal' range?







- ? Finally bear in mind that most of the time we have been talking about individual differences that are within a 'normal' range, but what about abnormal or atypical differences?
- ? For example intelligence is very different in many children with atypical development (developmental disorders) – think back to lecture 5 when we looked at children with Down syndrome

# Individual Differences Summary







- ? People demonstrate individual differences in personality, intelligence, and emotions (attachment)
- ? Several theories have been proposed to account for such differences
- ? Next week we'll look at how we measure differences

### **Self Managed Learning**

#### ? Reading

- Schacter, D., Gilbert, D., Wegner, D, & Hood, B. (2012).
   Psychology: European Edition. Hampshire, UK: Palgrave Macmillan. (Chapter 9 on Intelligence, Chapter 12 on Attachment, and Chapter 13 on Personality)
- Optional Reading: similar chapters from many other introductory psychology texts, such as those listed under Optional Material at the end of the module guide.
- ? I've also provided an additional chapter (handout) which is more of an introduction to individual differences
  - Chamorro-Premuzic, T (2011). Personality and Individual Differences. West Sussex, UK: BPS Blackwell. (Chapter 1 – Introducing Individual Differences)

#### ? Sample Question

 Describe psychological characteristics which differ amongst individuals, and discuss the reasons for such differences