

## Psychology: Abnormality - Notes for 01/10/03

### **Biological (medical) Model of Abnormality**

- Assumptions:
  - Sufferer is not to blame
  - Condition must be treated by medical means
  - Treatment must follow the medical model of treatment:
    - Identify symptoms
    - Diagnose syndrome (using a classification system)
    - Prescribe suitable treatment.
- History:
  - When people first discovered the condition of insanity, the assumption was that it was psychological and not biological.
  - This was until Western Science: "Everything can be explained biologically".
    - Underlying physiological processes for every behaviour:
      - Stress – physiological endocrine system and ANS
      - Hunger and thirst – the hypothalamus
    - Mental disorders are mental illnesses
    - Sufferers are patients not clients
    - Control is given to experts.
- Further assumptions:
  - Physical factors include:
    - Genes can give a predisposition bipolar, schizophrenia
    - Biochemicals
    - Neuronanatomy
    - Microorganisms

### **Biochemicals**

Biochemicals such as serotonin play a key role in the neurochemistry of the brain. They operate in the synapses which bridge the gap between the neurons. They enable transmissions to take place through all the neural pathways. If there is not enough biochemical available, transmissions will be slow or interrupted. Too much biochemical and there will be a tendency for transmissions to be too fast or even repeated.

### **Case Study: Phineas Gage**

- Happened during the 19<sup>th</sup> century;
- He worked on the US railways as an engineer – a responsible job;
- He was a polite, quiet and well-mannered man;
- One day there was an accident – a 6 foot railway iron with a spike on one end through his right cheek, behind his nose, and outside his left frontal lobe. The pole went straight through his head and out the other side;
- After the initial shock, he got up, finished what he was working on and then fainted;
- After he had recovered, people noticed changes after a few months;
- His personality had changed – he had "ceased to be him". He became anti-social, an alcoholic, swearing all the time, uncivilised, could not hold down a job.
- Years later at his death, it was found that there was severe left frontal damage.
  
- Severe personality disorders are often physical in cause.

### **Microorganisms**

There is one line of research into Schizophrenia suggesting that a particular type of schizophrenia is caused by infection of a flu virus from the mother of the foetal brain during the first three months of gestation.