

Contrast and compare two perspectives within psychology

[Psychology](#)



**ASSIGN
BUSTER**

The two perspectives that are going to be focused on in this assignment are the cognitive perspective and the biological perspective. Within the above perspectives, the key points are going to be the contrast of these perspectives and how they compare with reference to emotions.

There are several main areas of psychology, each area (or perspective) gives different kinds of information, which we can use in an attempt to understand people and their behaviour. Before we begin to analyse our chosen perspectives here is an insight of a few other areas within ? and it's history.

The emergence of psychology is dated at 1879, when Wilhelm Wundt opened the first psychological laboratory in Leipzig, Germany. Wundt attempted to investigate the mind through 'introspection' (the process of observing the operations of one's mind). In 1913 psychologists, especially John. B. Watson, an American psychologist, questioned introspection. He stated that no accurate results could be proved as everybody's thought processes were different. Only the individual can observe there own mental processes. Watson believed that behaviour should be studied, as it was measurable and can be observed by more than one person. This was known as behaviourism and dominated psychology for the next forty years. It was at this time that Psychology broke away from Philosophy.

In Austria and Germany 20 years later, Gestalt psychologist also reacted to the idea of structuralism and behaviourism, they studied on the basis that 'the whole is greater than the sum of its parts'. Gestalt ?'s were mainly interested in people's perceptions and they believed perceptions could not be broken down in the way Wundt stated.

Earlier that century in around 1900, Freud, a neurologist published his psychodynamic theory of personality, he believed that the unconscious mind played a large role in understanding behaviour. Freud's theories also represented an alternative to behaviourism. According to Freud, " the unconscious is the source of our motivations, whether they be simple desires for food or sex, neurotic compulsions, or the motives of an artist or scientists. ([http://www. ship. edu/~cgboeree/freud. html](http://www.ship.edu/~cgboeree/freud.html)2002).

One of the main areas within psychology is known as the cognitive perspective. This is to do with gathering and use of information, taking information in and making sense of it (perception). How we retain, attain and regain information. These mental processes are known as cognition, which is how cognitive ? got its name. Some accounts of the cognitive perspective date back to the early 1900's originating from two early schools of thought, Structuralism and Gestalt's (the focus being mental processes). The actual cognitive perspective didn't occur until the late 1950's as a major challenge to behaviourism. It was around this time that scientists started to compare the human brain to a computer. The computer provided the ideal analogy and a good basis for understanding human cognition. Therefore, cognitive ?'s seek to explain cognition in terms of an information processing system, the brain being the processor and the data being both the input and output from it.

The year 1956 was a very important year within the cognitive perspective. At a meeting at the Massachusetts Institute of Technology (MIT), Chomsky introduced his theory of language, Miller presented a paper on 'the magical

number seven' in short term memory, and Newell and Simon presented a paper on the logical theory machine, with a further paper from Newell and Simon et al (1958).

As we are unable to observe our thought processes directly, we can still gain an insight in to them by ways of experiments and making inferences on a person's behaviour. These inferences have to be supported by objective and empirical data. Therefore, cognitive ?'s often use the experimental method of research with the emphasis being on control. Sometimes a method known as protocol analysis is used to give scientists an insight into how people solve problems. This involves asking people to talk aloud about what they are thinking as they do a test, at the same time analysing what they say. One criticism of research carried out within a laboratory setting is that the results can be 'unrealistic' as the setting of the experiment is unrealistic. (www. pitt. edu/suthers)

The biological perspective looks at the role of the brain when trying to explain behaviour. This includes the function of the Central Nervous System (CNS) and the influence of hormones. It also looks at genetics and the heritability of behavioural traits. Biological psychologists are specifically interested in the biology of behaviour. Psychologists who study the biological perspectives are known as bio-psychologists.

The role of genetics in behaviour is also linked to the nature-nurture debate, are we born the way we are or do the environment and our peers influence our behaviour?

The CNS and the brain consists of billions of neurons which are used to carry electrical impulses (or chemical messages) to and from the brain, each neuron is linked together by a synapse, these tiny buttons release neurotransmitters into vesicles of the next neuron.

There are around 100 different kinds of neurotransmitters found in the brain each plays some role in behaviour. Often we find a key behaviour with each neurotransmitter.

The Bio perspective is very scientific based and can be studied in many ways, for example, Lashley (1920's) carried out a series of experiments in which he demonstrated that memory and learning are impaired if part of the brain cortex is removed. This technique is known as ablation, it involves the removal of parts of the brain by surgery or by the use of electrodes.

The brain can now be studied using several non-intrusive techniques, for example, the angiogram, an x-ray picture of dyes injected into the blood and from the early 1970's, cat scans (computerised axial tomogram) were used as they were more sophisticated than the angiogram.

Emerging from the 1980's came PET (positron emission tomography) and MRI (magnetic resonance imaging). PET is similar to angiogram research, the difference being, radioactive glucose is injected into the brain instead of dyes, creating moving pictures of the active brain. Therefore, the brain can be seen working while somebody is talking, speaking or listening. All the above methods of studying brain activity are based in the hospital, which can prove expensive and time consuming.

A well-established way of measuring brain activity is the EEG (electroencephalogram), first used by Berger 1929. This method can be used on conscious people without discomfort by attaching electrodes to the skin. Electrical impulses in the cortex can be monitored and seen in a graph form on a meter.

Much well established research has highlighted the close interaction between mental processes and biological changes within the body. Hans Selye (1956, 1974) carried out research, which led him to propose the General Adaptation Syndrome (GAS), which describes hormonal, biochemical and physiological factors in individuals. (Perspectives in Psychology, Wadeley, Birch and Malin (1992).