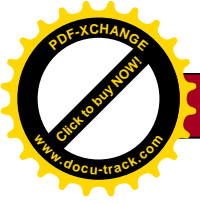


PERSPECTIVES

NATURE - NURTURE

Nature - is the view espoused by nativists. Nature refers not simply to abilities present at birth but to any ability determined by genes, including those appearing through maturation.

Nurture - is the view of empiricists, the view that everything is learned through interactions with the environment, the physical and social world, more widely referred to as 'experience'.



PERSPECTIVES

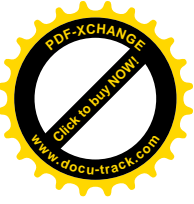
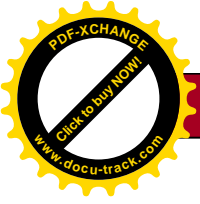
NATURE – NURTURE

HISTORY OF THE DEBATE

Before 1900

Plato, the Greek philosopher, believed that a child began life with knowledge already present within him.

In the 17th century, the French philosopher René Descartes argued similarly, whereas his English contemporary, empirical philosopher John Locke, proposed that there were no innate ideas. He believed that the mind at birth is like 'white paper void of all characters', a 'blank slate'.



PERSPECTIVES

NATURE - NURTURE

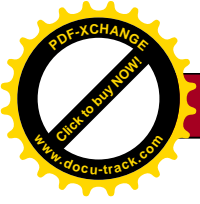
HISTORY OF THE DEBATE cont...

The dawn of psychology

Darwin's theory of evolution, with its message that traits were inherited, influenced early psychologists.

James(1890) believed that humans beings had innate tendencies in which determined natural selection.

These views were however swept away by the tide of behaviourism championed by Watson(1913) and Skinner(1938), all behaviour could be explained solely in terms of experienced.



PERSPECTIVES

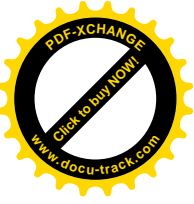
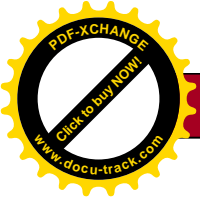
NATURE - NURTURE

HISTORY OF THE DEBATE cont...

The dawn of psychology

The idea of the mind, at birth, as a 'blank slate' became orthodoxy in the 20th century, although there were challenges.

Ethologists such as Lorenz and Tinbergen in the 1930s, introduced the concepts of *instinct* and *critical* period, both innate features of behaviour.



PERSPECTIVES

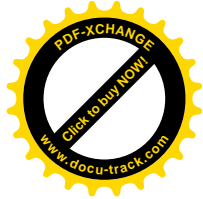
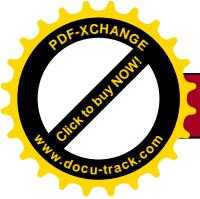
NATURE – NURTURE

HISTORY OF THE DEBATE cont...

The dawn of psychology

In the 1950s, Chomsky challenged the behaviourist account of language acquisition, suggesting that it happened not just through experience but because human children had an innate language module in the brain.

Also in the 1950s, Burt was promoting the heritability of IQ. The latest move away from 'blank slatism' has been the swing towards evolutionary psychology because it explains behaviour in terms of innate factors.



PERSPECTIVES

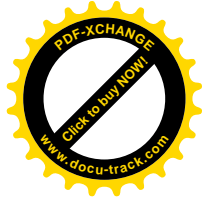
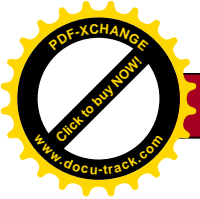
NATURE - NURTURE

Assumptions about nature and nurture in psychological research

Assumptions about nature

Evolutionary psychologists assume that behaviour is a product of natural selection in the **environment of evolutionary adaptation**(EEA).

Interpersonal attraction can, for example, be explained as a consequence of **sexual selection** - men and women select partners who enhance their reproductive success.



PERSPECTIVES

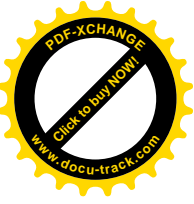
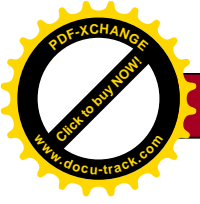
NATURE - NURTURE

Assumptions about nature and nurture in psychological research cont...

Assumptions about nurture

Radical psychologists (such as Skinner and Watson) assume that all behaviour can be explained in terms of experience alone. Skinner (1957) proposed that a child's acquisition of language could be explained entirely in terms of *rewards* and *shaping*.

The double bind theory of schizophrenia (Bateson et al., 1956) suggests that schizophrenia develops in children who frequently receive contradictory messages from their parents.



PERSPECTIVES

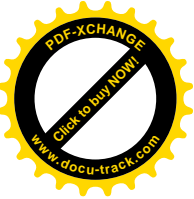
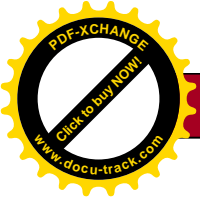
NATURE - NURTURE

Assumptions about nature and nurture in psychological research

The nature - nurture debate perception

The two main theories of perception...

[1]Gibson(1979) - argued that perception is entirely innate because the sensory array is sufficiently rich in information for perception to take place without any additional cognitive input.



PERSPECTIVES

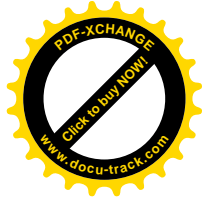
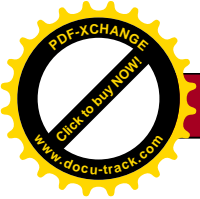
NATURE - NURTURE

Assumptions about nature and nurture in psychological research

The nature - nurture debate perception

The two main theories of perception...

[2]Gregory(1972) - pointed to the ambiguous and fragmentary nature of most sensory input, which must thus rely on expectations (derived from experience) to complete the perceptual process.



PERSPECTIVES

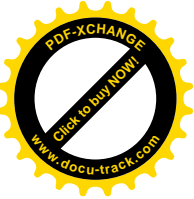
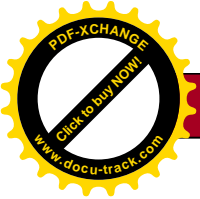
NATURE - NURTURE

Assumptions about nature and nurture in psychological research

The nature - nurture debate intelligence

Twin and adoption studies suggest that a large component of the variation in IQ is caused by genetic factors.

Gene - mapping studies (e.g. Chorney *et al.*, 1998) have identified individual genes associated with high IQ. There is strong evidence for the effects of nurture, for example the fact that IQs all over the world have increased as much as 20 points over 30 years (Flynn, 1987).



PERSPECTIVES

NATURE - NURTURE

Different views regarding the relationship between nature and nurture

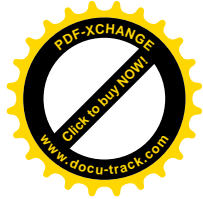
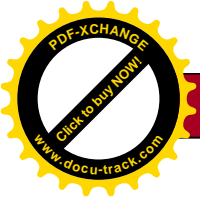
Nature affects nurture

Genes may affect behaviour directly or may exert an indirect effect in a number of ways.

[1] Gene-environment *reactive*.

[2] Passive influence.

[3] *Active* influence or niche-picking.



PERSPECTIVES

NATURE - NURTURE

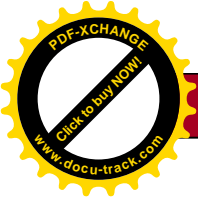
Different views regarding the relationship between nature and nurture

Nurture affects nature

Experience effects innate systems.

The brain has the ability, during development and adulthood, to be changed by experience.

Pascual-Leone *et al.* (1995) found the region of the brain that controls finger movement increased in size in participants who played a piano finger exercise daily over only 5 days.



PERSPECTIVES

NATURE – NURTURE

EXAM QUESTIONS

Discuss the nature-nurture debate, with reference to psychological theories **and/or** studies. (30 marks)

...

(a) Explain what is meant by the nature-nurture debate. (5 marks)

(b) Discuss **two or more** examples of the nature-nurture debate in psychology. (25 marks)