Piaget's stage theory of development

Stage 1: Sensori-motor stage (from birth to about 2 years)

Children are born with innate behavioural patterns (reflexes), which are their first means of making sense of their world. Children can take in new knowledge and experiences as far as they are consistent with their existing behaviours. Eventually they begin to generate new behaviours in response to their environment (schemas). As contact with the environment increases, they develop more elaborate patterns of behaviour. This stage ends when children are able to represent their behaviours internally.

Stage 2: Pre-operational stage (from about 2 to 6 years)

Children begin to use combinations or sequences of actions that can be carried out symbolically. For example, putting two objects together can be represented symbolically as an abstract mathematical principle (addition). However, at this stage children are only able to perform them as actions in the real world rather than to represent them symbolically.

Stage 3: Concrete operations stage (from about 6 to 12 years)

During this stage children are mastering the ability to act appropriately on their environment by using the sequences of actions they acquired in the pre-operational stage. They develop the ability to generate ‘rules’ based on their own experiences (e.g. noticing that adding something to a group of objects always ‘makes more’). Children can now manipulate their environment symbolically too, so they can imagine adding ‘more’ to a group of objects. They are still only able to understand the rules that they have had concrete experience of, but can now begin some mental manipulation of these concepts. What they are unable to do at this stage is use rules to anticipate something that could happen, but that they have not yet experienced.

Stage 4: Formal operations stage (from about 12 years onwards)

By this stage children can reason in a purely abstract way, without reference to concrete experience. They can tackle problems in a systematic and scientific manner and are able to generate hypotheses about the world based on their accumulated representations of it.