Worksheet 6.1

Example answer to practice question 2 (Chapter 6)

This model answer is a guide for students in terms of structure and content. It represents above-average work.

2 Evaluate one psychology theory relevant to developmental psychology. [22 marks]

The psychology theory I will address and evaluate in this answer is Jean Piaget’s theory of cognitive development. Developmental psychology deals with the lifelong process of change and is the study of how, and why people change over time in the way they behave, think, and relate to others. Working within this approach, Piaget developed the following basic assumptions about cognitive development.

• Intelligence is under genetic control and develops in the form of predetermined stages.

• Children do not passively receive their knowledge; they are curious, self-motivated and seek out information to construct their own understanding of the environment.

• Individuals construct their view of the world through mental frameworks of understanding.

Piaget argued that knowledge developed through cognitive structures known as schemas. Schemas are mental representations of the world and how the individual interacts with it. As a child develops, his or her schemas develop as a result of his or her interaction with the world. Piaget proposed four stages each child moves through in sequential order during cognitive development. Each stage is more sophisticated than the last and is the result of biological maturation and an active interaction with the environment. The sensorimotor stage (0–2 years) is characterized by the infant having no formal schema for the world or itself. It can only know the world via its immediate senses and the motor or movement actions it performs. This stage is illustrated by concepts such as profound egocentrism and a lack of object permanence. The pre-operational stage (2–7 years) shows a child who cannot rely on internal logical rules and is still dominated by the cognitive limiting effects of egocentrism as he or she has a limited ability, or in some cases no ability, to see, think, feel or imagine the world from another’s point of view.

There are criticisms of the Piagetian view of these first two stages. Children often design complex games with multiple roles for themselves and their props, suggesting a more sophisticated understanding of objects than the simple lack of conservation ability. For example, Field et al. (1982a) found 4–5-year-old children can spend as much as 20% of their playtime constructing sophisticated roles for different objects above and beyond their intended use (e.g. blocks become trucks, brooms become horses). Another criticism is the negative tone Piaget uses: by using terms such as ‘pre-operational’, he focused on what children cannot do rather than what they can achieve. Children can also develop imaginary characters with whom they engage in conversation. This is seen as
a sign of a rich imagination and a normal part of the development of pretence for children (Taylor et al., 1993a). These elaborate fantasies demonstrate the advanced skills children possess in re-imagining the world for their own use and they provide a more complete picture of the child at this age than Piaget.

Piaget’s next stage is the concrete operational stage (7–11 years). During this stage, the child develops definitive rules or schemas for ordering the world. The final stage is the formal operations stage where the child’s mental structures are so well developed that ideas and problems can be manipulated mentally without the need for physical objects.

Criticism can be levelled at the ‘ages and stages’ part of his theory as it suggests a fixed definitive scale for cognitive development which is at odds with the real world of a child. However, Piaget produced the first comprehensive theory of child cognitive development and he modified the theory to take account of criticism and envisaged it constantly changing as new evidence came to light. It is also important to remember the theory is biologically based and demonstrates the child as a determined, dynamic thinker, anxious to achieve coherence and test theories. Piaget developed the notion of constructivism – he argued children are actively engaged with constructing their knowledge of the world rather than acting as passive receivers of information. This now widely accepted idea changed the view of childhood and significantly influenced the education profession.

Piaget’s methods have been criticized as too formal for children. When the methods are changed to show more ‘human sense’, children often understand what is being asked of them and show cognitive ability outside of their age-appropriate stage. An example of this is his approach to demonstrating the egocentrism (Piaget and Inhelder, 1956) of the pre-operational child through the ‘three mountain experiment’. When 4-year-olds were shown a mountain scene, they tended to be unable to describe the same scene from the point of view of a doll on the other side. However, the mountain scene apparatus has been criticized as being too far from the normal operating world of the child – children are not used to seeing such scenes. They may have been confused by the layout, by adult objects placed on the scenes and by the need to identify the doll’s position through a photograph. When Hughes (1975) used a policeman doll instead of a mountain scene (the children had to hide a boy doll from two policeman dolls who were arranged around a piece of cardboard apparatus) 90% of 4-year-olds were successful. This demonstrates that the egocentrism seen in the pre-operational child can be overcome if the task is made more age appropriate. In the ‘three mountain experiment’ Piaget focused on an abstract mental problem failing to understand the social undercurrents the policeman doll allowed the child to see.

Piaget failed to distinguish between competence (what a child is capable of doing) and performance (what a child can show when given a particular task). When tasks were altered, performance and therefore competence were affected. The notion of biological readiness has also been questioned: If a child’s cognitive development is driven solely by innate factors, then training would not be able to propel the child onto the next stage. However, when methods are modified and children are allowed to learn from their mistakes they have shown characteristics of later stages which a strictly biological approach should not see them as possessing. Piaget did go some way to account for this as he argued children will experience uneven cognitive development due to personalized learning styles. Piaget has been criticized for under-estimating the role of language as well as the role of social development in cognitive development (addressed by Vygotsky). The theory is very descriptive but
it does not provide a detailed explanation for the stages and the model can be seen as too rigid and inflexible. However, its supporters argue that Piaget never intended it to be seen in such a light, and it should be seen more as a metaphor and a guiding principle for teaching and learning.