

TABLE 6.1

## Criticism of Piaget's Theory: Support and Counterarguments

CRITICISM OF PIAGET'S THEORY	SUPPORT FOR THE CRITICISM	COUNTERARGUMENTS
1. Underestimates children's cognitive abilities.	<p>Infants achieve object permanence earlier than Piaget proposed.</p> <p>Preoperational children can pass concrete-operational tasks when they are modified to simplify instructions or reduce memory and language demands.</p>	<p>Research findings with younger infants may indicate only an awareness that the perceptual array has changed, rather than clear acquisition of object permanence.</p> <p>Children's success on simplified concrete operational tasks may be due to lower level cognitive competencies (e.g., using a counting strategy on number conservation) rather than logico-mathematical reasoning (reversibility).</p>
2. Proposes that cognitive development cannot be meaningfully accelerated.	<p>Preoperational children can learn conservation (not just memorize answers) through various methods, such as providing corrective feedback (right or wrong), directing their attention to the appropriate visual cues, modeling adult behavior, and working with peers who have mastered conservation.</p>	<p>Piaget was interested not in the rate of development, accelerations, and delays but in describing processes that account for developmental changes. The rate of progression through the stages will vary, depending on individuals' previous experiences.</p>
3. Wrongly proposes that self-discovery is necessary for cognitive development.	<p>There is little available evidence to support unguided, self-discovery as necessary for cognitive development.</p>	<p>Discovery can enhance thinking when students are given appropriate structure and guidance.</p>
4. May not be stagelike.	<p>Children master different conservation tasks at different ages—number conservation around age 7; mass, somewhat later; and liquid conservation, toward the end of concrete operations—even though conservation is a concrete operational acquisition.</p>	<p>Piaget's theory allowed for asynchrony in development, proposing continual transformations and integration of less advanced thinking into more complex forms of thinking. The stages give us a "big picture" of these transformations.</p>
5. Is limited to Western cultures.	<p>Critics argue that Piaget's theory is not universal as he originally proposed.</p>	<p>The sequence of development through the four stages has been found in cultures around the world, from Mexico and Australia to Thailand, Rwanda, Papua, Iraq, and Ghana.</p> <p>Research showing that the rate of development through stages varies across cultures supports Piaget's assertion that intellectual development depends on specific cultural and educational environments.</p>

SOURCES: Au, Sidle, & Rollins, 1993; Baillargeon, 1991; Brainerd, 2003; Chandler & Chapman, 1991; Dasen, 1977; Greenfield, 1976; Lourenço & Machado, 1996; Miller & Baillargeon, 1990; Piaget, 1924, 1932, 1972b; Rogoff & Chavajay, 1995; Smith, 1993; Sternberg, 2003; Zigler & Gilman, 1998.