

**CASE STUDY: LITTLE ALBERT**

**INTRODUCTION:** John B. Watson and Rosalie Rayner showed how conditioning could be used on a human infant. The study led to ethical questions on research with humans. From such research, Watson concluded that there are only a few instinctive reflexes in humans, among them sucking, reaching, and grasping. In addition, infants have three innate emotional responses to stimuli: fear at hearing a loud sound or at suddenly being dropped; rage when arm or head movements are forcibly restrained; and love when stroked, rocked, gently patted, and the like.

**HYPOTHESIS:** Most human behaviors and emotional reactions are built up on conditioned responses. (When an emotionally exciting object stimulates the subject simultaneously with an object not emotionally exciting, the latter object may in time arouse the same emotional reaction as the former object.)

**METHOD:** Watson and Rayner presented Albert (a well-adjusted 9-month-old) with many objects, including a rat, blocks, a rabbit, a dog, a monkey, masks with and without hair, cotton, wool, and burning newspapers. Albert showed no fear of any of these objects - they were all neutral stimuli for the fear response.

Watson and Rayner decided that, when Albert was 11 months old, they would attempt to condition him to fear rats. They began by placing a furry white rat in front of him. Albert would reach out to touch it, and each time he did, one of Watson's assistants would strike a metal bar with a hammer behind Albert. The first time the metal bar was struck,

Albert fell forward and buried his head in a pillow. The next time he reached for the rat and the bar was struck, Albert began to whimper. The noise, the *unconditioned stimulus*, brought about a naturally *unconditioned response* - fear. After only a few such pairings, the rat became a *conditioned stimulus* that elicited a *conditioned response* - fear.

Five days after Watson and Rayner conditioned Albert to fear rats, they presented him with blocks, a rabbit, and a dog, each alone.

They also showed him a number of other stimuli, including a Santa Claus mask. Albert reacted fearfully to all but the blocks. His conditioned fear response generalized to include the rabbit and all white furry objects he was shown, but not to any dissimilar toys.

**RESULTS:** One of the most frequent criticisms of the experiment was that Watson and Rayner taught a well-adjusted child to be fearful. Apparently, the researchers knew at least one month ahead of time that Albert would be leaving the study, and yet made no attempt to extinguish his conditioned fears (Harris, 1979). Psychologists today are unable to repeat the Little Albert study because of the ethical standards of the A.P.A.

One of Watson's students, Mary Cover Jones (1924, 1974), developed an extinction procedure called counter-conditioning to reduce people's existing fears. Peter was a boy who was extremely fearful of rabbits. Jones helped Peter eliminate his fear by pairing the feared object (the rabbit) with pleasant experiences, such as eating ice cream or receiving special attention.

**QUESTIONS (Answer on separate sheet):**

1. **Did the results of Watson and Rayner's experiment support their hypothesis? Explain.**
2. **How did Albert's response become generalized?**
3. **How were the principles of classical conditioning used to reduce Peter's fear of rabbits?**

