

Infants keep imitation in mind

Among infants 18 months of age and younger, psychologists have noted a number of important influences on learning and knowledge about objects. Individual discovery and training by adults have been assigned major roles in the developmental experiences of these infants. Often unappreciated, however, is the youngsters' ability to remember and later imitate the behavior of others, an investigator contends in the July *DEVELOPMENTAL PSYCHOLOGY*.

Psychologist Andrew N. Meltzoff of the University of Washington in Seattle studied the ability of 14-month-old infants to imitate simple behaviors one week after seeing them demonstrated by an adult. A total of 12 infants watched an experimenter perform simple actions with a series of toys: pulling apart a detachable, dumbbell-shaped toy, pushing a hinged flap over the top of a box, pushing the button on another box to produce a beeping sound, shaking a plastic egg that rattled and jiggling a stuffed bear by a string attached to its head. A final toy-related action, unlikely to be performed by infants during spontaneous play and thus "novel," involved the experimenter leaning forward and touching a plastic panel on top of a wooden box with his forehead. When touched, the panel was illuminated by a light bulb in the box.

One week later, all but one of the infants imitated three or more playful actions when given the toys. The novel action was imitated by eight infants. In contrast, only three of 24 infants in control groups performed three or more of the same actions. Some control children were given the toys without ever having seen them before; others had seen the toys but not the specific actions to be imitated. None of the 24 controls performed the novel act, notes Meltzoff.

Previously, says Meltzoff, the longest delay in studies of infant imitation had been one day. "The results show that infants are able to internally represent the acts they see adults perform, and are motivated to use these representations to guide their own subsequent behavior, even after lengthy delays," he concludes.

Psychiatric diagnoses, East and West

A good deal of similarity exists between the ways Chinese and Western physicians define mental disorders, according to a report in the July *AMERICAN JOURNAL OF PSYCHIATRY*. In the first study of nonhospitalized Chinese mental patients using the diagnostic guidelines of the American Psychiatric Association, Lori L. Altshuler of the National Institute of Mental Health and her colleagues also find some marked cultural differences in the diagnosis of depression.

Altshuler's diagnoses of 116 patients seen at the Shanghai Mental Health Center matched those of Chinese psychiatrists at the facility in three-quarters of the cases. Severe depression and manic depression accounted for one out of four of Altshuler's diagnoses; the rest encompassed a range of psychiatric problems, including schizophrenia, dementia, anxiety disorders and paranoid disorders.

But almost half the patients diagnosed as severely depressed by Western standards received a different diagnosis by Chinese psychiatrists. If depressed patients have any delusions or hallucinations, they are diagnosed as schizophrenic by the Chinese, says Altshuler; those who also complain of physical symptoms are often given a diagnosis of anxiety disorder. These diagnostic differences may account for much higher reported rates of depression in the United States than in China, suggests Altshuler.

Whereas women are more commonly diagnosed as depressed in the United States, she adds, there was an equal proportion of depressed men and women among the Chinese outpatients.

Lovastatin wins cholesterol battle

In the first large clinical study comparing two of the major drugs used to treat high serum cholesterol, researchers have concluded that lovastatin, a new drug approved last September (SN: 9/12/87, p.166), works more effectively and causes fewer side effects than the standard cholestyramine resin therapy. The drugs are among the six approved for use in lowering the level of low-density lipoprotein (LDL) cholesterol in the bloodstream. High LDL levels are believed to contribute to heart disease in some people.

Involving 264 men and women from 12 clinical centers across the United States, the study was coordinated by Merck, Sharp & Dohme of West Point, Pa., which makes lovastatin. Researchers found the average LDL cholesterol level dropped by 32 percent when a 20-milligram dose of lovastatin was given twice a day for 12 weeks. Patients experienced a 42 percent average reduction in LDL cholesterol after taking a 40-milligram dose over the same period. For patients taking cholestyramine resin, researchers reported a 23 percent lower LDL level after 12 grams of cholestyramine resin therapy twice a day (the maximum recommended dosage) for the same 12 weeks. All groups saw 85 percent of the reduction within two weeks after the study began.

Writing in the July 15 *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*, the researchers report that only one serious side effect — regional muscle pain experienced by a 65-year-old woman in the 40-mg dosage group — was thought to be directly linked to lovastatin, and ended when the patient stopped taking the drug. Less serious effects, such as constipation, were more common in the cholestyramine resin therapy group.

Both drugs slightly increased patients' levels of high-density lipoprotein cholesterol — the so called "good cholesterol" that appears to protect against heart disease.

"Our study clearly demonstrates that lovastatin is both considerably more effective and much better tolerated than cholestyramine resin therapy," the researchers state. They recommend further testing on one aspect of the study: Women seemed to respond to lovastatin better than men, although there were no gender differences in responses to cholestyramine resin therapy.

Toddler revived after hour underwater

In an incident that serves as a reminder that many upper limits of stress on the human body remain unknown, a 2-year-old girl from Salt Lake City was revived without serious brain damage 66 minutes after a sibling saw her fall into an ice-cold creek. Her doctors report in the July 15 *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* that "as far as we know, this is the longest time ever reported" for a person to have gone without breathing and be revived.

The toddler was pulled from water measured to be 41°F; rescuers recorded the child's body temperature at approximately 66°F. She was wheeled into the operating room two hours after her rescue and placed on a heart-lung pump equipped with a warmer.

Once her body temperature climbed to about 77°F, her heart began beating and her pupils reacted to light. Eight weeks later when her parents checked her out of the hospital, her only complication was a slight tremor. Now, her pediatricians write, a year has passed and the tremor "has shown progressive improvement."

Howard Corneli of the Primary Children's Medical Center in Salt Lake City says the child was spared brain damage because the cold was quick and severe, making her cells stop breathing oxygen almost completely. It also made her appear dead. "There's a saying in emergency rooms that a patient who's cold and dead needs to be warmed up before you decide," he says.