**Observational Learning**

Observational learning occurs when a behavior is learned by observing the consequences that others receive for performing it. This was demonstrated by a classic experiment by Bandura, Ross, and Ross (1963). They asked nursery school children to observe an adult model striking a large inflated Bobo doll with a mallet. The model also hit, kicked, threw rubber balls at, and sat on the doll. He or she also emitted phrases like “sockaroo” and “bang bang bang.” During the assault, the model said a number of unusual sentences, probably things the kids had never heard before. Neither the model nor the observing children were reinforced at any time. Later, after the model had gone, the children were secretly observed as they played in a toy-filled room with the Bobo doll. For comparison, other children who had not seen the model’s behavior were also allowed to interact with the doll. The results of the experiment clearly demonstrated that the children who had observed the model’s behavior were far more likely to be aggressive than were the other children. These results would not have been predicted by the association or instrumental learning theorists, who thought that learning only occurred through classical or operant conditioning. Thus, Bandura had identified a new type of learning.

Question: Why would a child imitate a behavior when imitation is not reinforced? A lot of theorists believe that imitating others is favored by natural selection. That is, there is a potential survival value in imitating others’ successful behavior, and we may be naturally predisposed to imitate others’ behavior. As we grow older, not only does imitation have survival value, it also has value socially and interpersonally. If you are in a situation in which you really don’t know what to do, what is the first thing you do? Imitate others. Example—being in an aerobics class and not knowing how to do the steps—you watch others. We look to other people’s behavior as a guide to our own. So, imitation can also help us behave in ways that are more desirable socially.

Another question: Wouldn’t other species also benefit from social learning behavior because of its survival value? The answer is yes. Dachsund puppies learned to pull a food cart sooner when they saw other puppies doing it than when they didn’t observe such behavior. Bottle-nosed dolphins learned to pull a rope into their pool by watching other dolphins. Rats learned by observing rat leaders who were the first to discover the best route through a cage door. Another study demonstrated that naïve rats learned to copulate faster when they saw other mide do so.

Four processes must occur before observational learning will take place:

1. Attention to the model’s actions
2. Retention—remember the model’s actions
3. Reproduction—must be able to perform the response
4. Motivation—must be motivated to perform. Here the concept of reinforcement is important. The biggest thing is that a cognitive representation is formed of the outcome. You can learn a behavior that you have never attempted or for which you have never been reinforced.

There is a difference between acquisition and performance of behavior. Consider a second experiment by Bandura. One group of children watched as a model was reinforced for aggressive behavior with juice and candy, and another group of children watched as the adults were chastised for the behavior. The children who observed the model receiving the juice and candy behaved more aggressively later than the children who observed the model being disciplined for aggressive behavior. They rarely imitated the model. You may acquire a behavior, but not perform it if you believe performance will result in negative consequences.

One application of Bandura’s research is to the topic of **TV violence and aggression.** Eighty percent of all prime-time shows contain at least one act of physical violence. By age 16, children have witnessed 13,000 killings on TV. The most violent shows are cartoons, in which there are about 20 violent incidents on average per hour. A significant relationship has been found between the amount of violence in children’s favorite television programs and the amount of aggressiveness that children display. Among adolescents, it’s been found that boys who have gotten into serious fist fights at work or school were more likely ot have watched violent TV programs than were other adolescents. Note that these studies are correlational—what does that say about causality?

There have also been some experimental studies (Bandura’s was experimental). For example, Hanratty et al. used 4 and 5 year-old boys from a Sunday school. Half watched a 2 ½ minute movie in which an adult committed aggressive acts against a human clown. Other children saw a nonaggressive movie. Afterward, they were allowed to play in a room with some toys and a live clown. Children who had seen the film engaged in significant physical aggression against the clown, whereas none of the other children were aggressive. Also, children in the aggressive condition showed increased aggression against other toys in the room. Similar results have been obtained with girls in other studies. TV violence may be desensitizing. Studies have found that real violence is less arousing after watching TV violence. On the other hand, researchers have examined trends in violent crimes, burglary, and auto theft and have found no consistent relationship between the pattern of these crimes and the advent of TV into almost every household in the U.S. So, violent crime has roots beyond mere exposure to TV.

Is there any way children who are exposed to violence will not be affected negatively? One way to help may be to set clearcut behavior rules and to help the child discriminate between the make-believe of TV and the reality of his/her own actions. Rewarding children for calm, affectionate behavior may also help. In one study, preschoolers who, before watching violence, were trained to be gentle and affectionate with one another were less affected by the aggressive actions they saw. To sum up, the issues here are similar to those with pornography and violence. There is some type of relationship, but the exact nature of it is not clear-cut. Obviously, many factors contribute to expression of violence, and it’s entirely possible that the amount of time devoted to watching violent acts may be one of them.

Finally, Bandura’s social learning theory has been applied to other settings. With children, for example, it has been used to help them get over fear of dogs. Bandura did some research in which he showed a film of a child petting a dog through some bars, then pet the dog without a leash on it, feed the dog biscuits, and finally, play inside a closed playpen with the dog. Then the fearful children were coaxed into following the model’s lead. Of the children who observed the model play with the dog, 67% were able to stay alone with the dog inside a playpen. A much lower percentage of children who did not see the film were willing to do that.