Social Learning: How We Learn Aggression Through Observation

Authored by

mohammad looti

June 17, 2026

The Bobo doll experiment was the name of two experiments conducted by Albert Bandura in 1961 and 1963 studying patterns of behavior associated with aggression. Bandura hoped that the experiments would prove that aggression can be explained, at least in part, by social learning theory. The theory of social learning would state that behavior such as aggression is learned through observing and imitating others. The experiments are important because it sparked many more studies on the effects of violent media on children.

Method(1961)

The subjects studied in the experiment involved 36 boys and 36 girls from the Stanford University Nursery School ranged between the ages of 3 and 6. The total of 72 children were split into 3 groups of 24. One group was put into an aggressive model scenario with half of that group observing a same-sex adult model and half observing a different-sex adult model. Another group was exposed to a non-aggressive adult model and the final group would be used as a control group and would not be exposed to any adult model at all. The children were pre-selected and sorted to ensure an even spread of personality types across the test groups. Some of these children were already known to be more aggressive than others.

Aggressive adult model scenario (24 children) - Same-sex adult model - Different-sex adult model

Non-aggressive adult model (24 children) - Same-sex adult model - Different-sex adult model

Control Group (24 children)

For the experiment, each child was exposed to the scenario individually, so as not to be influenced or distracted by classmates. The first part of the experiment involved bringing a child and the adult model into a playroom. In the playroom, the child was seated in one corner filled with highly appealing activities such as stickers and stamps. The adult model was seated in another corner containing a toy set, a mallet, and an inflatable Bobo doll. Before leaving the room, the experimenter explained to the child that the toys in the adult corner were only for the adult to play with.

During the aggressive model scenario, the adult would begin by playing with the toys for approximately one minute. After this time the adult begins to show aggression towards the Bobo doll. Examples of this include hitting the Bobo doll and using the toy mallet to hit the Bobo doll in the face. After a period of about 10 minutes, the experimenter came back into the room, dismissed the adult model, and took the child into another playroom. The non-aggressive adult model simply played with the small toys for the entire 10 minute-period. In this situation, the Bobo doll was completely ignored by the model then the child was taken out of the room.

The next stage placed the child and experimenter into another room filled with interesting toys: a truck, dolls, and spinning top. There, the child was invited to play with the toys. After about 2 minutes the experimenter decides that the child is no longer allowed to play with the toys. This was done to build up frustration. The experimenter says that the child may play with the toys in the experimental room including both aggressive and non-aggressive toys. In the experimental room the child was allowed to play for the duration of 20 minutes while the experimenter evaluated the child's play.

The first measure recorded was based on physical aggression. This included punching or kicking the Bobo doll, sitting on the Bobo doll, hitting it with a mallet, and tossing it around the room. Verbal aggression was the second measure recorded. The judges counted each time the children imitated the aggressive adult model and recorded their results. The third measure was the amount of times the mallet was used to display other forms of aggression than hitting the doll. The final measure includes modes of aggression shown by the child that were not direct imitation of the role-model's behavior.

Results (1961)

Bandura found that the children exposed to the aggressive model were more likely to act in physically aggressive ways than those who were not exposed to the aggressive model. For those children exposed to the aggressive model, the number of imitative physical aggressions exhibited by the boys was 38.2 and 12.7 for the girls.

The results concerning gender differences strongly supported Bandura's prediction that children are more influenced by same-sex models. Boys exhibited more aggression when exposed to aggressive male models than boys exposed to aggressive female models. When exposed to aggressive male models, the number of aggressive instances exhibited by boys averaged 104 compared to 48.4 aggressive instances exhibited by boys exposed to aggressive female models.

While the results for the girls show similar findings, the results were less drastic. When exposed to aggressive female models, the number of aggressive instances exhibited by girls averaged 57.7 compared to 36.3 aggressive instances exhibited by girls exposed to aggressive male models.

Bandura also found that the children exposed to the aggressive model were more likely to act in verbally aggressive ways than those who were not exposed to the aggressive model. The number of imitative verbal aggressions exhibited by the boys was 17 times and 15.7 times by the girls. In addition, the results indicated that the boys and girls who observed the nonaggressive model exhibited far less non-imitative mallet aggression than in the control group, which had no model.

The experimenters came to the conclusion that children observing adult behavior are influenced to think that this type of behavior is acceptable thus weakening the child's aggressive inhibitions. The

result of reduced aggressive inhibitions in children means that they are more likely to respond to future situations in a more aggressive manner.

Lastly, the evidence strongly supports that males have a tendency to be more aggressive than females. When all instances of aggression are tallied, males exhibited 270 aggressive instances compared to 128 aggressive instances exhibited by females.

Critique

Hogben and Byrne stressed on the importance of onfoundations of social learning in place of tangibly measureable rewards. Reward is eminent to the Social Learning theory of aggression as innately we would repeat an action or behavior after receiving a desirable reinforcement. Unless the children were rewarded for their emulation of attacking the 'bobo doll' or the clown would become a personal habit to exert aggression? The experiment was also biased in several areas which weakened the internal validity.

1. Selection bias

Bandura's subjects were all from the nursery of Stanford University. During the 1960s, the opportunity of studying in a university, especially one as prestigious as Stanford was a privilege that only the upper-middle class whites had. Besides, the racial bias and economic status of the whites and blacks were still very vast at that time. Generally only the upper-middle class and rich whites were able to afford putting their children in a nursery. Thus, the subjects would turn out to be mostly white and of similar backgrounds.

2. Unclear history of subjects

The ethnicities of the subjects were never documented but Bandura and his colleagues made sweeping statements on their findings when explaining the aggression and violence trait among subgroups and lower socioeconomic communities.

3. Ambiguous temporal sequence

As the data of the "real life aggression and control group conditions came from their 1961 study", parallel ongoing events including the mental maturation of the subjects could have been confused with the observations and results of the 1963 study.

Bar-on, Broughton, Buttross, Corrigan, et al. (2001) explained that the underdeveloped frontal lobe of children below the age of 8 causes them to be unable to separate reality from fantasy. As an example, children up to the age of 12 believe that there are monsters in their closet or under the bed. They are also sometimes unable to distinguish dreams from reality.

Furthermore, biological theorists argue that the social learning theory completely ignores individual's biological state by ignoring the uniqueness of an individual's DNA, brain development, and learning differences.

According to Worthman and Loftus (1992), Bandura's study was unethical and morally wrong as the subjects were manipulated to respond in an aggressive manner. They also find it to be no surprise that long-term implications are apparent due to the methods imposed in this experiment as the subjects were taunted and were not allowed to play with the toys and thus incited agitation and dissatisfaction. Hence, they were trained to be aggressive.

Although there have been other research which glamorized the effects of violent movies and video games such as Plagens et al.'s 1991 study on violent movies, "Feshbach and R.D. Singer believed that television actually decreases the amount of aggression in children" (Islom, 1998) - Catharsis effect. A study was made on juvenile boys for six weeks. Half were made to view violent movies throughout the period of six weeks while another half viewed non-violent movies for six weeks. The boy's behavior was then observed and the result was boys who viewed violent movies were less aggressive than those who viewed non-violent movies. The conclusion drawn by Feshback and Singer was that those who viewed violent movies were less aggressive as they were able to transmit all their feelings and thoughts of aggression into the movie.

Variations of the 'Bobo doll' experiment

Due to numerous criticisms, Bandura replaced the 'Bobo doll' with a live clown. The young woman beat up a live clown in the video shown to preschool children and in turn when the children were lead into another room where they found a live clown, they imitated the action in the video they had just watched.

Variation 1:

In Friedrich and Stein (1972)'s 'The Mister Rogers' study:

Procedures: A group of preschoolers watched Mister Rogers every weekday for four consecutive weeks.

Result: Children from lower socioeconomic communities were easier to handle and more open about their feelings.

Variation 2:

Loye, Gorney & Steele (1977) conducted variation of the 'Bobo Doll' Experiment using 183 married males aged between 20 to 70 years old.

Procedure: The participants were to watch one of five TV programs for 20 hours over a period of one week while their wives secretly observed and recorded their behavior; helpful vs. hurtful behaviors when not watching the program.

Result: Participants of violent programs showed significant increase in aggressive moods and "hurtful behavior" while participants who viewed pro-social programs were more passive and demonstrated a significant increase of "emotional arousal".

Variation 3:

Black and Bevan's research (1992) had movie-goers fill out an aggression questionnaire either before they entered the cinema and after the film; a violent film and a romantic film.

Procedure: Subjects were randomly selected as they went to view violent and romantic film. They were asked to fill out pretest and posttest questionnaires on their emotional state.

Result: Those who watched violent films were already aggressive before viewing the film but it was aggravated after the viewing while there was no change in those who viewed romantic films.

Variation 4:

Numerous research done using violent video games have also led to aggressive behaviors. Anderson & Dill (2000) randomly assigned college students to play two games; Wolfenstein, a science fiction first-person shooter game and Tetris. At the end of the games, those who played Wolfenstein showed more aggressive thoughts and feelings than those who played Tetris.

Discussion

Bandura's Bobo Doll Experiment showed that aggressive behaviors may be learned through observation, for instance children will imitate an adults aggressive behavior. This can result in a child using aggression to solve future problems. It was also shown that aggression is considered a male trait, in today's society male aggression is seen as acceptable and in turn in praised. Girls, not confident of displaying physical aggression, almost matched the boys in Bandura's experiments in terms of verbal aggression.

From this experiment, Bandura established that there are 4 processes that are apparent in the modeling process.

1. Attention

One has to be paying attention and not distracted to be able to absorb knowledge. Physical factors such as being tired, having a hangover, being sick, nervous, extremely excited or distracted by a

competing stimuli would mar one's focus on a subject. For example, when a student is in love, he or she would only be thinking of his/her loved one. All else is a blur; hear but not listening, see but not looking, eat but not tasting, breathing but not smelling and so on.

2. Retention

The proof that one has been paying attention is when one is able to remember the intended stimuli. Imagery and language play a great part here. Memory is stored in "the form of mental images or verbal descriptions." Once it is stored, the memory can be recalled later and be replicated in one's actions and behavior.

3. Reproduction

This stage of modeling another requires one to have the ability to duplicate the action or/and behavior. A wheelchair bound person would not be able to duplicate a person doing cartwheels but one who is able to use all their limbs might be able to improve their cartwheel techniques after watching the video of a gymnast doing cartwheels. Similarly, after acquiring the ability to draw, one can improve their skills by watching an expert drawing or by emulating the instructions in a drawing book.

However, this does not mean that day-dreaming is useless. It in fact plays a part in refining our skills. "Our abilities improve even when we just imagine ourselves performing! Many athletes, for example, imagine their performance in their mind's eye prior to actually performing"

4. Motivation

a. Nonetheless, the most important part of the modeling process is motivation! If one is not motivated to emulate an action or behavior, attention would not be there to start with. According to Bandura, there are two categories of motives -positive and negative both of which are based on traditional behaviorism such as BF Skinner's Operant Conditioning and Pavlov's Classical Conditioning.

However, there are as many experiments conducted which support as well as nullify Bandura's hypothesis. So far, all the variations of Bandura's Bobo Doll Experiment have only focused on a maximum of three important factors; a combination of background, personal temperament, environment, interpersonal and intrapersonal relationships. Yet, a pretest of phobias and daily mood assessment were not assessed before the experiment. Thus, we can safely say that until an experiment takes all the factors into consideration and conducts a longitudinal assessment, Bandura's hypothesis is still on the fence.