

Bobo Doll Experiment

 simplypsychology.org/bobo-doll.html

Saul McLeod, updated 2014

During the 1960s, Albert Bandura conducted a series of experiments on observational learning, collectively known as the Bobo doll experiments.

Two of the experiments are described below:

Aim

Bandura (1961) conducted a study to investigate if social behaviors (i.e., aggression) can be acquired by observation and imitation.

Sample

Bandura, Ross, and Ross (1961) tested 36 boys and 36 girls from the Stanford University Nursery School aged between 3 to 6 years old.

The researchers pre-tested the children for how aggressive they were by observing the children in the nursery and judged their aggressive behavior on four 5-point rating scales.

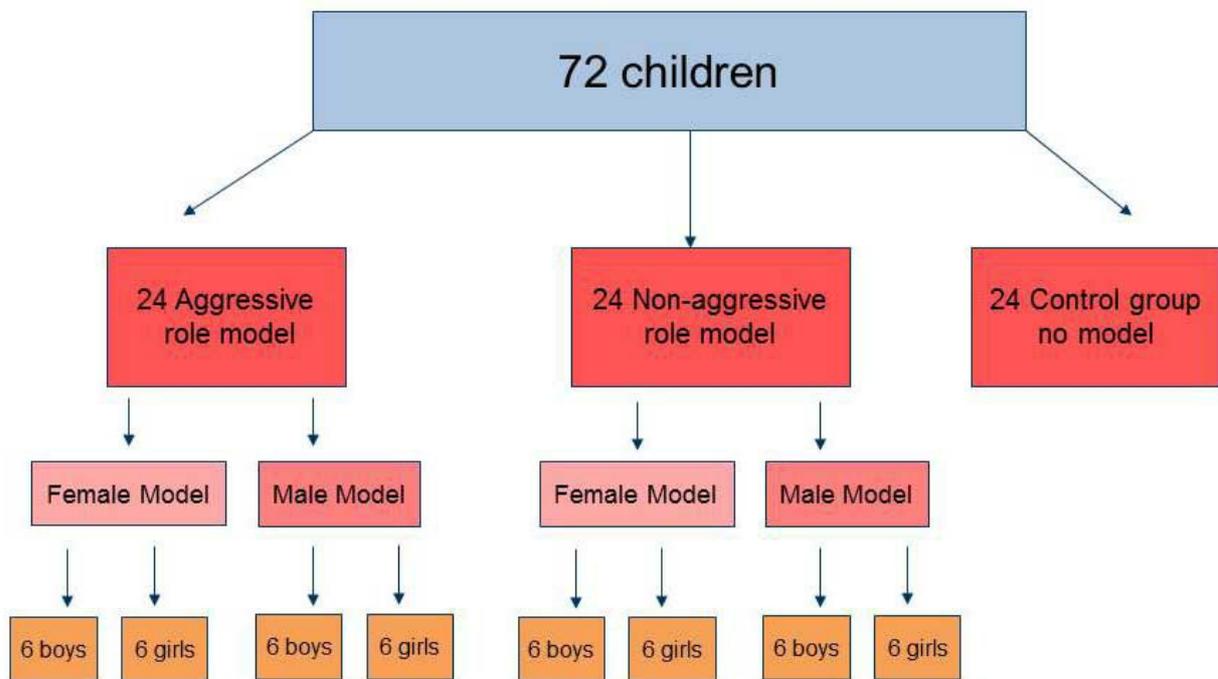
It was then possible to match the children in each group so that they had similar levels of aggression in their everyday behavior. The experiment is, therefore, an example of a matched pairs design.

To test the inter-rater reliability of the observers, 51 of the children were rated by two observers independently and their ratings compared. These ratings showed a very high reliability correlation ($r = 0.89$), which suggested that the observers had a good agreement about the behavior of the children.

Method

A lab experiment was used, in which the independent variable (the type of model) was manipulated in three conditions:

- Aggressive model is shown to 24 children
- Non-aggressive model is shown to 24 children
- No model shown (control condition) - 24 children



Stage 1: Modeling

In the experimental conditions children were individually shown into a room containing toys and played with some potato prints and pictures in a corner for 10 minutes while either:

1. 24 children (12 boys and 12 girls) watched a male or female model behaving aggressively towards a toy called a 'Bobo doll'. The adults attacked the Bobo doll in a distinctive manner - they used a hammer in some cases, and in others threw the doll in the air and shouted "Pow, Boom."
2. Another 24 children (12 boys and 12 girls) were exposed to a non-aggressive model who played in a quiet and subdued manner for 10 minutes (playing with a tinker toy set and ignoring the bobo-doll).
3. The final 24 children (12 boys and 12 girls) were used as a control group and not exposed to any model at all.

Animation created by Wes Venables

Stage 2: Aggression Arousal

All the children (including the control group) were subjected to 'mild aggression arousal.' Each child was (separately) taken to a room with relatively attractive toys.

As soon as the child started to play with the toys, the experimenter told the child that these were the experimenter's very best toys and she had decided to reserve them for the other children.

Animation created by Wes Venables

Stage 3: Test for Delayed Imitation

- The next room contained some aggressive toys and some non-aggressive toys. The non-aggressive toys included a tea set, crayons, three bears and plastic farm animals. The aggressive toys included a mallet and peg board, dart guns, and a 3 foot Bobo doll.
- The child was in the room for 20 minutes, and their behavior was observed and rated through a one-way mirror. Observations were made at 5-second intervals, therefore, giving 240 response units for each child.
- Other behaviors that didn't imitate that of the model were also recorded e.g., punching the Bobo doll on the nose.

Results

- Children who observed the aggressive model made far more imitative aggressive responses than those who were in the non-aggressive or control groups.
- There was more partial and non-imitative aggression among those children who had observed aggressive behavior, although the difference for non-imitative aggression was small.
- The girls in the aggressive model condition also showed more physical aggressive responses if the model was male, but more verbal aggressive responses if the model was female. However, the exception to this general pattern was the observation of how often they punched Bobo, and in this case the effects of gender were reversed.
- Boys were more likely to imitate same-sex models than girls. The evidence for girls imitating same-sex models is not strong.
- Boys imitated more physically aggressive acts than girls. There was little difference in the verbal aggression between boys and girls.

Conclusion

The findings support Bandura's (1977) Social Learning Theory. That is, children learn social behavior such as aggression through the process of observation learning - through watching the behavior of another person.

This study has important implications for the effects of media violence on children.

Evaluation

There are three main **advantages** of the experimental method.

1. Experiments are the only means by which cause and effect can be established. Thus, it could be demonstrated that the model did have an effect on the child's subsequent behavior because all variables other than the independent variable are controlled.

2. It allows for precise control of variables. Many variables were controlled, such as the gender of the model, the time the children observed the model, the behavior of the model and so on.

3. Experiments can be replicated. Standardized procedures and instructions were used, allowing for replicability. In fact, the study has been replicated with slight changes, such as using video and similar results were found (Bandura, 1963).

Limitations of the procedure include:

- Many psychologists are very critical of laboratory studies of imitation - in particular because they tend to have low ecological validity. The situation involves the child and an adult model, which is a very limited social situation and there is no interaction between the child and the model at any point; certainly the child has no chance to influence the model in any way. Also, the model and the child are strangers. This, of course, is quite unlike 'normal' modeling, which often takes place within the family.
- Cumberbatch (1990) found that children who had not played with a Bobo Doll before were five times as likely to imitate the aggressive behavior than those who were familiar with it; he claims that the novelty value of the doll makes it more likely that children will imitate the behavior.
- A further criticism of the study is that the demonstrations are measured almost immediately. With such snap shot studies, we cannot discover if such a single exposure can have long-term effects.
- It is possible to argue that the experiment was unethical. For example, there is the problem of whether or not the children suffered any long-term consequences as a result of the study. Although it is unlikely, we can never be certain.

Vicarious Reinforcement Bobo Doll Study

An observer's behavior can also be affected by the positive or negative consequences of a model's behavior. So we not only watch what people do, but we watch what happens when they do things. This is known as vicarious reinforcement. We are more likely to imitate behavior that is rewarded and refrain from behavior that is punished.

Bandura (1965) used a similar experimental set up to the one outlined above to test vicarious reinforcement. The experiment had different consequences for the model's aggression to the three groups of children.

One group saw the model's aggression being rewarded (being given sweets and a drink for a "championship performance," another group saw the model being punished for the aggression (scolded), and the third group saw no specific consequences (control condition).

When allowed to enter the playroom, children in the reward and control conditions imitated more of aggressive actions of the model than did the children in the punishment condition.

The children in the model punished group had learned the aggression by observational learning, but did not imitate it because they expected negative consequences. Reinforcement gained by watching another person is known as vicarious reinforcement.

References

Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. *Journal of personality and social psychology*, 1(6), 589.

Bandura, A., Ross, D. & Ross, S.A. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, 63, 575-82.

Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *The Journal of Abnormal and Social Psychology*, 66(1), 3.

Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.

How to reference this article:

McLeod, S. A. (2014). Bobo doll experiment. Retrieved from <https://www.simplypsychology.org/bobo-doll.html>