Transmission of Aggression Through Imitation of Aggressive Models

Bandura, Ross, and Ross
1961
Bell Ringer

- How much of a child's actions do you think is directly related to the actions of the parent/parents or those around them?
- Do you think it differs for male versus female children?
- **Children are watching**
Article Read

• Read the article Bandura-Social Learning Theory
Albert Bandura is, perhaps, best known for his role in developing social learning theory. Social learning theory is an approach to child development which states that children develop through learning from other people around them. In particular social learning theorists emphasize the role of observation and imitation of role models. In general, social development is seen as a continuous learning process, rather than as happening in stages.
The social learning approach has its origins in the traditional theories of classical and operant conditioning - the behaviorist perspective. Behaviorists try to explain the causes of behavior by studying only those behaviors that can be directly observed and measured. For behaviorists the study of private mental processes (cognitive processes like memory or perception) had no place in psychology.
Along with other behaviorist psychologists, the social learning (SL) theorists believe that all behavior is learned.

Although SL theorists agree that we should observe what is observable, they also believe that there are important cognitive processes which need to be studied to explain behavior. These cognitive processes cannot be observed but can only be inferred from observing actual behavior.

It is important to note that although SL theorists take cognitive factors into account it is still, primarily, behavior which is of interest.
The aim of Bandura's study was to demonstrate that if children were passive witnesses to an aggressive display by an adult they would imitate this aggressive behavior when given the opportunity.
The researchers made the following 4 predictions:

- "...subjects exposed to aggressive models will reproduce aggressive acts resembling those of the models..."
- "...the observation of non-aggressive models will have a generalized inhibiting effect on the subject's subsequent behavior..."
- "...subjects will imitate the behavior of a same-sex model to a greater degree than a model of the opposite sex..."
- "...boys will be more predisposed than girls towards imitating aggression...“

Bobo Doll Experiment
Bell Ringer

• Complete the Social Learning Theory (SLT) worksheet by using your own unique example of observational learning following the steps.
PROCEDURE/METHOD

- Tested 36 boys and 36 girls aged between 37 to 69 months (mean = 52 months).
- Role models were 1 male adult and 1 female adult.
- The method was a laboratory experiment.
- The design of the experiment has 3 major conditions;
  - the control group
  - the group exposed to the aggressive model
  - the group exposed to the passive model.
The children who were exposed to the adult models were further sub divided by their gender, and by the gender of the model they were exposed to. A summary of these groups is shown below.

- Control group - 24 subjects
- Eight experimental groups (each with 6 subjects)
- Aggressive model condition - 24 subjects
- Non-aggressive model condition - 24 subjects
## PROCEDURE/METHOD

### Aggressive Model Condition

<table>
<thead>
<tr>
<th>6 BOYS WITH SAME SEX MODEL</th>
<th>6 BOYS WITH OPPOSITE SEX MODEL</th>
<th>6 GIRLS WITH SAME SEX MODEL</th>
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### Non-Aggressive Model Condition

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<th>6 BOYS WITH SAME SEX MODEL</th>
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PROCEDURE/METHOD

• This complicated design therefore has three independent variables. The condition the children were exposed to, the gender of the role model and the gender of the child.
However, the number of children in each group is quite small (six) and the results could be distorted if one group contained say 3 children who are normally quite aggressive.

For example, if the researchers found that a particular group, such as the 6 boys who were witness to an aggressive display by a male, were the most aggressive this could have resulted because this small group of 6 boys were already the most aggressive children.
The researchers attempted to reduce this problem by pre-testing the children for how aggressive they were.

They observed 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. The observers were the experimenter (female), a nursery school teacher (female), and the model for male aggression. The two observers "were well acquainted with the children".
PROCEDURE/METHOD

• The rating scales were;
  • (a) physical aggression
  • (b) verbal aggression
  • (c) aggression towards inanimate objects
  • (d) aggressive inhibition
Reflective

• Bandura V. Freud
• Behaviorists v. psychodynamic theory
Bell Ringer

• Do you think the children were aggressive to the bobo doll because they had watched a model be aggressive to the doll or do you think it was because bobo dolls are made to hit? Why? Do you think the children were interpreting their own behavior as play?
PROCEDURE/METHOD

- **Stage 1** - children were brought to the experimental room by the experimenter. The model, who was in the hallway outside the room, was invited to come in and join in the game.
- The room was set out for play and the activities were chosen because they had been noted to have high interest for nursery school children.
- One corner was arranged as the child's play area, where there was a small table and chair, potato prints and picture stickers. After settling the child in its corner the adult model was escorted to the opposite corner of the room where there was a small table, chair, tinker-toy set, a mallet and a five foot inflatable Bobo doll.
- After the model was seated the experimenter left the experimental room.
PROCEDURE/METHOD

• Non-aggressive condition- model ignored Bobo and assembled the tinker-toys in a quiet, gentle manner.
• Aggressive condition- model began by assembling the tinker-toys, but after 1 min. turned to Bobo and was aggressive to the doll in a very stylized and distinctive way.
PROCEDURE/METHOD

• An example of physical aggression was "raised the Bobo doll and pommelled it on the head with a mallet",

• An example of verbal aggression was, "Pow!" and "Sock him in the nose".

• After 10 mins. the experimenter entered and took the child to a new room which the child was told was another games room.
• **stage 2**: the child was subjected to 'mild aggression arousal'. The child was 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.
Then the child was taken to the next room for **stage 3** of the study where the child was told it could play with any of the toys in there.

The experimenter stayed in the room "otherwise a number of children would either refuse to stay alone, or would leave before termination of the session".

In this room there was a variety of both non-aggressive and aggressive toys.
PROCEDURE/METHOD

• Non-aggressive toys included a tea set, crayons, three bears and plastic farm animals.

• Aggressive toys included a mallet and peg board, dart guns, and a 3 foot Bobo doll.

• The child was kept in this room for 20 mins. during which time their behavior was observed by judges through a one-way mirror. Observations were made at 5-second intervals therefore giving 240 response units for each child.
You are to take on the role of a 53 year old man or woman who has been arrested for assaulting a clown in a circus. Write a letter in your defense claiming to have been affected by having been a child in a nursery at Stanford University when Bandura, Ross, and Ross did their study. It can be very detailed in terms of procedure!

OR

Take on the role of the chair of an ethics board (expert witness) who makes a judgment on whether the claim should be supported. It will obviously raise the ethical issues and whether the potential effects could be so long term and/or significant.
PROCEDURE/METHOD

• 3 measures of imitation were obtained:
• 1. Imitation of physical aggression (for example, punching the doll in the nose)
• 2. Imitative verbal aggression (for example, repeating the phrases "Pow!" or "Sock him in the nose".
• 3. Imitative non-aggressive verbal responses (for example child repeats “He keeps coming back for more”)

They also looked at two types of behaviors that were not complete imitations of the adult model:

1. Mallet aggression (for example, child strikes toy with mallet rather than Bobo.)
2. Sits on Bobo (for example, child sits on Bobo but is not aggressive towards it)
They also recorded 3 aggressive behaviors that were not imitations of the adult model. These were all aggressive behaviors which were not carried out by the model.

1. Punches Bobo
2. Non-imitative physical and verbal aggression
3. Aggressive gun play
PROCEDURE/METHOD

• The results enabled the researchers to consider
  • (a) Which children imitate the models
  • (b) Which models the children imitate
  • (c) Whether the children showed a general increase in aggressive behavior or a specific imitation of the adult behaviors.
RESULTS/FINDINGS

- The main findings were.
  - The children in the aggressive model condition made more aggressive responses than the children in the non-aggressive model condition
  - Boys made more aggressive responses than girls;
  - The boys in the aggressive model conditions showed more aggressive responses if the model was male than if the model was female;
RESULTS/FINDINGS

– The girls in the aggressive model conditions 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).
• Interestingly Bandura reported that the aggression of the female model had a confusing effect on the children, perhaps because it did not fit in with their prior learning about what is culturally appropriate behavior. For example, one of the children said, "Who is that lady? That's not the way for a lady to behave. Ladies are supposed to act like ladies...", and another child said, "You should have seen what that girl did in there. She was punching and fighting but no swearing".
RESULTS/FINDINGS

- However the aggressive behavior of the male model fitted more comfortably into a cultural stereotype of appropriate behavior. For example, one boy said, "Al's a good sucker, he beat up Bobo. I want to sock like Al", and one of the girls said, "That man is a strong fighter, he punched and punched and he could hit Bobo right down to the floor and if Bobo got up he said, 'Punch your nose', He’s a good fighter like Daddy."
EXPLANATION FOR FINDINGS

• The findings support Bandura's 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.

• Central to Social Learning Theory is the identification of which types of models are more likely to be imitated.
Appropriateness of the model

- In the study it was found that aggressive male models were more likely to be imitated than aggressive female models. One probable reason for this is to do with sex roles: perhaps it is more acceptable in Western culture for men to be aggressive than women, and even by three or four years of age children are learning the dominant stereotypes that relate to sex-role differences. So aggressive male models are more likely to be imitated since this is seen by the child as more fitting or appropriate for men (in general) than for women (in general).
Relevance of the Model

• Bandura found that boys were more likely to imitate the aggressive male model than the female role model. Perhaps the greater relevance of the male model's behavior for boys lies in the fact that boys perceive the similarity between themselves and the model.
Similarity of the Model

• Bandura therefore found that similarity between the model and the child is another important factor. Perception of this similarity is based upon development of the child's gender identity, i.e. the ability to classify itself (and others) as a girl or boy, female or male. The first stage of this ability is not usually reached until two to two-and-a-half years of age.
Similarity of the Model

- Bandura has carried out many other studies (not just on aggression) showing that a number of other important characteristics are important for imitation. For example nurturing (warm and friendly) adults are more likely to be imitated than unfriendly ones. That more powerful models are more readily imitated and that adults who are seen to be rewarded for their behavior are more likely to be imitated.
• There are three main advantages of the experimental method.

  – 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.
STRENGTHS

– 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.

– Experiments can be **replicated**. Standardized procedures and instructions were used allowing for reliability. In fact the study has been replicated with slight changes, such as using videos and similar results were found.
WEAKNESSES

• Not **ecologically valid**. 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.
WEAKNESSES

• 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.

• The study has also been criticized for interpreting the behavior towards the Bobo doll as aggression. Perhaps the children interpreted their own behavior as play.
WEAKNESSES

• 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.
As already noted Bandura believed that his findings supported his Social Learning Theory. Social Learning Theory has been widely accepted as a useful theory in psychology. Many complex behaviors (e.g. language) could probably never be acquired unless children were exposed to people who modeled them. Observational learning allows the young child to acquire many novel responses in a large number of settings where the models are simply going about their own business and not trying to teach the child anything. Language again is a good example.
This is, of course, a double-edged sword - often the modeled behavior is not what the parents (or society in general) would approve of (e.g. smoking, swearing and aggression). Children are continually learning a whole range of behaviors (desirable and undesirable) through the basic processes of observation and imitation. In support of Social Learning Theory the best predictor of whether somebody is likely to smoke is whether or not his or her parents smoke.
Experiments such as this one by Bandura have tended to focus on aggression perhaps because compared with, say, pro-social behavior it is easier to objectively measure. Or so the researchers believe. Social learning theory actually provides an optimistic theory of aggression because it argues that pro-social behavior can be learnt in the same way as more negative behavior such as aggression and since the theory suggests that aggression is learned behavior it is possible to modify or change such behavior.
The findings from this and similar studies have been used in the argument that media violence might be contributing in some degree to violence in society. The obvious criticism of this argument is that there are many other factors influencing whether or not we are likely to imitate screen violence. One of the major factors is perhaps the level of aggression we already have, which might have been learned, in our family relationships or elsewhere.
Social Learning Theory has also been used to explain the so-called 'cycle of violence', or more technically 'the inter-generational transmission of aggression'. The basic idea is that if you have been the victim of (physical) abuse as a child, you are more likely to be an abusing parent than if you haven't. It also increases the chances that you will be a wife - or a husband - batterer. It is also important to note that such early experiences make it more probable that people will become more aggressive but it is never certain, or inevitable. Why?
EVALUATION OF EXPLANATION

• Interestingly, physical punishments are often demonstrations of the very behavior which parents are trying to eliminate in their child - ironically, the evidence suggests that the child is likely to become more, not less aggressive!
EVALUATION OF EXPLANATION

• The major criticism of the Social Learning Approach to child development is its oversimplified description of human behavior. Although it can explain some quite complex behavior it cannot adequately account for how we develop a whole range of behavior including thoughts and feelings. We have a lot of cognitive control over our behavior and simply because we have had experiences of violence does not mean we have to reproduce such behavior.
It is also worth noting that the Social Learning Approach has little room for the role of inherited factors or for the role of maturation in development.