CORE STUDY #1: BANDURA ET AL. 1996 (AGGRESSION)

<u>Aim:</u>

Investigate whether a child would learn aggression through imitation by observing a model and whether or not they would reproduce this behavior in the absence of the model. There were 3 individual aims for this study:

- 1) To investigate whether aggression can be learned
- 2) To investigate whether the subject will imitate aggression
- 3) To investigate whether the sex of the model is significant

Hypotheses:

There were 4 hypotheses for this study:

- 1) Observed aggressive behavior will be imitated; children who see an aggressive model will be more aggressive than those who observe a neutral model or no model.
- 2) Non-aggressive behaviors will also be imitated, so children observing the non-aggressive model will be less aggressive.
- 3) Children are more likely to copy same-sex models
- 4) Boys will be more likely to imitate aggressive behavior than girls.
- ★ Imitative social learning the learning of new behavior that is observed in a role model and imitated later in the absence of that model

<u>Background:</u>

The study was based on the knowledge that children copy adults.

- L This could be because the immediate social setting makes the child imitate what they are watching. This is "facilitation" of the behavior by making it more likely that the child would imitate it.
- L It could also be because of the reinforcement of sex-appropriate behaviors. For boys, this would mean being masculine, strong, and violent, whereas for girls this would mean being reserved, peaceful, and motherly. Bandura therefore suggested that because children are ingrained with this stereotype, they are more likely to copy same-sex models and girls are less likely to be aggressive when compared to boys.

Method:

Participants

- 72 participants selected from the Stanford University Nursery school
- 3-5 years of age (37-69 months)
- The mean age of 4 years and 4 months (52 months)

Design

- Lab experiment using a matched pairs design
- Matching was achieved by the research and a nursery teacher independently rating 51 of the children on a scale from 0 to 5 based on how aggressive the children were
- A very good agreement between the two raters was achieved (0.89)
- 8 conditions
- 3 IVs tested:
 - L The behavior of the model (aggressive or non-aggressive)
 - ∟ The sex of the model
 - ∟ The sex of the children

Procedure

- The aggressive model was shown to 24 children (12 boys and 12 girls). Half were shown a same-sex model (6 girls were shown a female model, 6 boys were shown a male model), and the other half were shown an opposite-sex model (6 girls were shown a male model, 6 boys were shown a female model).
- The non-aggressive model was shown to the other 24 children. Half were shown the same-sex model and the other half were shown an opposite-sex model.
- One more group of 24 children (12 boys, 12 girls) was the control group and did not see any model

There were 3 stages:

Stage 1: Modelling the behavior:

- Every child was taken into a playroom by the researcher who invited the child to play a game. This lasted 10 minutes
- In the experimental conditions, the model was also present in the room.
 - L In the aggressive condition, the model demonstrated aggressive behavior by kicking around a 3-foot-tall Bobo doll by hitting it, kicking it, throwing it in the air, and hitting it with a mallet.
 - L In the aggressive condition, the model also used verbal aggression saying things like "kick him", "sock him on the nose", and "Pow!".
 - ∟ In the non-aggressive condition, the model played normally with the non-aggressive toys such as crayons and plastic farm animals.

Stage 2: Aggression arousal:

• To annoy the children and increase the chances of them displaying aggressive behavior, the researchers were taken into a different playroom with very attractive toys, but they were told that they weren't allowed to play with them. This was for 2 minutes.

Stage 3: Testing for delayed imitations:

- The children were then observed playing for the next 20 minutes via a one-way mirror
- Two observers watched, and the room contained a variety of aggressive and non-aggressive toys, as well as the Bobo doll. These toys included:

Aggressive toys:

- ∟ A mallet
- L A peg board
- ∟ Dart guns
- ∟ The Bobo doll

Non-aggressive toys:

- ∟ A tea set
- $\hfill\square$ Plastic farm animals
- ∟ Three bears
- ∟ Crayon

3 types of aggression were recorded by the observers:

- 1) Imitative aggression physical and verbal aggression as modeled in the experimental conditions e.g. throwing the Bobo doll in the air
- Partially imitative aggression similar behaviors as carried out by the model e.g. sitting on the Bobo doll but not punching it
- 3) Non-imitative aggression new aggression not displayed by the model e.g. the model never used a gun, but the child did

Results:

- Children who observed the aggressive model made 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 child was more likely to copy aggressive behavior than think of new ways to abuse the doll)
- The girls in the aggressive condition showed more physically aggressive responses if the model was male, and more verbally aggressive responses if the model was female. The EXCEPTION to this pattern was how often they punched Bobo, and here the effects were reversed.
- Boys were more likely to imitate same-sex models than girls.
- Boys imitated more physically aggressive acts than girls. Girls were slightly more verbally aggressive.

Imitative physical aggression for girls in the aggressive vs. non-aggressive groups: 5.5 vs. 2.5 Imitative physical aggression for boys in the aggressive vs. non-aggressive groups: 7.2 vs. 0.0

Verbal comments made after the children observed the models were also recorded:

- When the female model was observed being aggressive, the comments made by the boys were: "Who is that lady? That's not the way a lady is supposed to behave. Ladies are supposed to act like ladies.", "You should've seen what that girl did in there. She was acting just like a man. I never saw a girl act like that. She was punching and fighting but not swearing."
- When the male model was observed being aggressive, the comments made by the girls were: "He's a good socker, he beat up Bobo. I want to sock like Al.", "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."

Conclusion:

- Witnessing aggressive behavior in a model can be enough to produce aggression in the observer.
- Children selectively imitate gender-specific behaviors. Boys were more likely to imitate physical aggression whilst girls verbal aggression

Evaluation:

A strength of this study is that it has high replicability. This is because it was done in a controlled lab environment with standardized procedures with "72 children from the Stanford University Nursery", and so another researcher can simply get another group of children "aged 3-5 years with a mean age of 52 months" and replicate the procedure to compare the results for accuracy. This increases the reliability of this experiment because the results can be tested.

Another strength of this study is that it has low demand characteristics. This is because it was a "covert, non-participant observation", and the "children were observed through a one-way mirror". The researcher was, therefore, able to observe the participants without being discovered or having any interaction with them, which decreased the likelihood of the participants figuring out the aim of the experiment and changing their behavior to seem more socially desirable. This increases the validity of the study as the participants were not able to change their behaviors which would have otherwise impacted the results.

A weakness of this study, however, is that it breaches the ethical guidelines of protection from physical and psychological harm. This is because "24 children were shown an aggressive model" during the experiment, and imitated the aggressive behavior displayed, which could have impacted them and stayed with them after the experiment had ended. The children left the experiment in an altered psychological state (more aggressive) than when they had entered. This reduces the credibility of the findings of this study.

Another weakness of this study is that it lacks ecological validity and mundane realism. This is because it was a "controlled laboratory experiment with standardized procedures", and the children were taken to artificial rooms with toys, some of which they were "not allowed to play with". These are unusual and unnatural settings for children to play in, and this, therefore, reduces the extent to which the findings can be applied to reality. This reduces the validity of the study.

Issues and Debates:

Supports situational explanation and nurture, as well as the social learning theory.