#### Children See...Children Do Observational Learning Theory: Albert Bandura

By: Joanna Paredes Child Growth and Development University of Dallas



#### Albert Bandura

- Born 1925 in Mundare, Alberta, Canada
- B.A. at University of British Columbia in 1949
- M.A. and Ph.D. at University of Iowa in 1951 and 1952
  - Specialized in Clinical Psychology
- Stanford University Faculty in 1953
  - Currently working there now
- Influenced by Robert Spears & collaborated with Richard Walters
- Wrote first book in 1959: Adolescent Aggression
- Received: Guggenheim fellowship, American Psychological Association awards, James McKeen Cattell Award
- President of APA in 1974 (trustee at 1975)
- Leading spokesman for behavioristic movement in modern times

#### **Bobo Experiment**

- Worked with Dorrie and Shiela Ross
- Focused on social modeling
- Children exposed to social models who expressed either violent or non violent behavior towards the Bobo dolls
- Children exposed to violent behaviors exhibited aggression
- Revealed the phenomenon of observational learning
- found imitation to occur more often when rewarded rather than punished, when model has high status, when model is similar to child



#### Symbolic Models

<text>

#### **Exemplary Models**

Exemplary: ■ Live model National heroes, villains, neighbors, family members ■ Reference to a model's behavior and characteristics



# Positive & Negative Exemplary

#### Positive Exemplary Model

 Model's behavior is told to be followed because it is considered good behavior

#### Negative Exemplary Model

 Model's behavior is told to be avoided because it is not considered good behavior





# **Observational Learning Theory**

- Combines behavioral and cognitive psychology
- Attentional Processes
- Retention Processes
- Motor Reproduction Processes
- Reinforcement and Motivational Processes







#### **Attentional Processes**

Model must be paid attention to ■ The value of the behavior being performed affects whether the behavior will be ignored or not Status of model is important



#### **Retention Processes**

- Behavior must be remembered in order to imitate
  - Images
  - Descriptive verbal symbols
  - Rehearsal

Those who use symbolic coding and rehearsal remember more than passive observers



## **Motor Reproduction Processes**

- To reproduce observed behavior:
  - Need necessary motor skills
  - Necessary cognitive development
- Imitated behavior is limited based on motor skills and cognitive development



## Reinforcement and Motivational Processes

#### Even if the model is...

- Attentive to the model
- Remembers the model's behavior
- Cognitively and physically capable of executing the behavior
- DOES NOT MEAN the behavior will be imitated consequences of behavior is negative
- Positive reinforcement encourages behavior and influences attention paid to model
- Punishment discourages behavior





# To observe Bandura's observational theory in 9-11 year old children

## **Critical Questions**

- 1) If children are asked to draw a picture with certain criteria, are they more likely to include all the criteria if an example and list is given to them, or if they just receive a list of the criteria without an example picture?
- 2) Are children more likely to be more attentive to the researcher model or the peer model?
- 3) Will children imitate the placement, type, and/or quantity of the criteria when an example is shown?

# Hypotheses

- Children will include all criteria when given an example picture, verbal instructions, and a list of the criteria.
- 2) Children will draw the picture of the researcher model.
- Children will imitate placement, type, and/or quantity of the objects in the model's picture in their own picture

#### **Population Sample & Setting**

- 21 students from Holy Family Nazareth School in Irving, Texas
- Ages 9-11 years old
- Conducted in a fourth grade classroom

#### Procedure

One child – peer model
20 Children split up into two groups
Group 1 (9 children)
Verbal Instruction + Example Picture + List
Group 2 (9 children)
Verbal Instruction + List

# Group 1

- **<u>Researcher</u>:** Hi everyone! My name is Joanna and I have a small assignment for all of you. Jonathan and I will be showing and describing two different pictures. It will then be up to you to pick one of the pictures to draw.
- **Peer:** I want you to draw a picture of the beach. (SHOW EXAMPLE PICTURE) This is an example drawing of the beach. If you choose to draw this picture, please include: ocean, sand, a sandcastle, sun, clouds, one animal, and a palm tree. (PEER WRITES CRITERIA ON BOARD)
- **Researcher:** I want you draw a picture of the mountains. (SHOW EXAMPLE PICTURE) This is an example drawing of the mountains. If you choose to draw this picture, please include: mountains, trees, a log cabin, sun, clouds, one animal, and a pine tree. (RESEARCHER WRITES CRITERIA ON BOARD) Now it's up to you to choose which picture you want to draw.

#### \* Criteria for Pictures \*

**Mountain** Mountains Trees Log Cabin Sun Clouds 1 Animal Pine Tree

**Beach** Ocean Sand Sand Castle Sun Clouds 1 Animal Palm Tree

#### Group 2

- **Researcher:** Hi everyone! My name is Joanna and I have a small assignment for all of you. Jonathan and I will be showing and describing two different pictures. It will then be up to you to pick one of the pictures to draw.
- **Peer:** I want you to draw a picture of the beach. If you choose to draw this picture, please include: ocean, sand, a sandcastle, sun, clouds, one animal, and a palm tree. (PEER WRITES CRITERIA ON BOARD)

**Researcher:** I want you draw a picture of the mountains. If you choose to draw this picture, please include: mountains, trees, a log cabin, sun, clouds, one animal, and a pine tree. (RESEARCHER WRITES CRITERIA ON BOARD) Now it's up to you to choose which picture you want to draw.

#### **Researcher or Peer?**

	Group 1	Group 2
Researcher		
(Mountain)	7	2
Peer		
(Beach)	2	7

# Chi-Square #1

WARNING - Some Expected values less than 5. Chi-Square may not be valid.

2-Way Contingend by	cy Tab	le		
FREQUENCY	Groi	1p 1   C	Group 2	TOTAL
Researcher		7	2	9
Peer		2	7	9
TOTAL 9 50.0 50.0	9 0 100	18 0.0		

Statistic	DF	Value	p-value
Chi-Square	1	5.556	0.019
Yates' Chi-Square	1	3.556	0.060
Fisher's Exact Test (c	one-tail)		0.028
(two-tail	)	0.	057
Phi Coefficient		.556	
Cramer's V		.556	
Contingency Coeffici	ent	.480	Ó
Relative Risk		3.500	
Odds Ratio		12.250	
Sensitivity		.778	
Specificity		.778	

## **Criteria Included?**

		Mountain Criteria		Beach Criteria
Child's Picture	Mountains	1 pt	Ocean	1 pt
	Trees	1 pt	Sand	1 pt
	Log Cabin	1 pt	Sand Castle	1 pt
	Sun	1 pt	Sun	1 pt
	Clouds	1 pt	Clouds	1 pt
	1 Animal	1 pt	1 Animal	1 pt
	Pine Tree	1 pt	Palm Tree	1 pt
	TOTAL	= 7 pts	TOTAL	= 7 pts

## **Criteria Included?**

	Group 1	Group 2		
Included all criteria	6	8		
<b>Omitted criteria</b>	3	1		

# Chi-Square #2

#### 2-Way Contingency Table by

FREQUENCY	Gro	up 1	Gro	up 2	T	OTAL
Included Criteria		6		8		14
Omitted Criteria		3		1		4
TOTAL 9 50.0 50.0	9 10(	18 ).0				

WARNING - Some Expected values less than 5. Chi-Square may not be valid.

Statistic	DF	Value	p-value
Chi-Square	1	1.286	0.257
Yates' Chi-Square	1	.321	0.571
Fisher's Exact Test (o	ne-tail)		0.288
(two-tail)	)		0.576
Phi Coefficient		.267	
Cramer's V		.267	
Contingency Coefficie	ent	.2	58
Relative Risk		.571	
Odds Ratio		.250	
Sensitivity		.667	
Specificity		.111	
Sensitivity and Specfic 'True' being	city calc	ulations a	are based on

## Imitation?

<u>Mountain</u>	Mountains	Trees	Log Cabin	Sun	Clouds	Animal	Pine Tree	Total
<u>Beach</u>	Ocean	Trees	Sandcastle	Sun	Clouds	Animal	Palm Tree	
Imitate	6	4	7	5	4	5	4	35
No imitation	3	5	2	4	5	4	5	28

#### Additional Observations...

Group 1 frequently asked questions

- "Does this look ok?"
- "What color do you want this?"
- "Can I draw more than one animal?"
- Group 1 took longer to draw than Group 2
- Many from Group 1 asked to redo their picture
  - "This looks messy."
  - "This doesn't look correct."

Group 1 constantly asked for my approval of the picture

# External & Internal Threats to Validity

- Convenience Sampling
- Small population sample
- Children knew researcher and their major in psychology
- Children knew researcher was friends with their teacher

#### Further Research...

- Same study conducted with 5 year olds and 15 year olds
- Same study conducted with children with a history of aggression against authoritative figures
- One-on-one interview with the children