

Elaboration Paradigm

(Babbie, p. 422)

<u>Partial relationships compared with original</u>	<u>Test variable is:</u>	
	<u>Antecedent</u>	<u>Intervening</u>
Same relationship	Replication	
Less or none	Explanation	Interpretation
Split (one is same or greater, other is less or none)	Specification	

Elaboration Paradigm

Percentage receiving Ph.D. by marriage in grad school (hypothetical)		
	<u>Got married in grad school</u>	
<u>Got Ph.D.</u>	<u>Yes</u>	<u>No</u>
Yes	65.0	80.0
No	<u>35.0</u>	<u>20.0</u>
Total	100.0	100.0
N	(200)	(200)

Elaboration Paradigm

Percentage receiving Ph.D. by marriage in grad school (hypothetical)		
	<u>Got married in grad school</u>	
<u>Got Ph.D.</u>	<u>Yes</u>	<u>No</u>
Yes	65.0	80.0
N	(200)	(200)

Succinct table reduces redundancy

Elaboration Paradigm

Percentage receiving Ph.D. by getting married by sex (hypothetical)

	<u>Sex</u>			
	<u>Men</u>		<u>Women</u>	
<u>Got Ph.D.</u>	<u>Married</u>	<u>Didn't marry</u>	<u>Married</u>	<u>Didn't marry</u>
Yes	80.0	80.0	50.0	80.0
No	<u>20.0</u>	<u>20.0</u>	<u>50.0</u>	<u>20.0</u>
Total	100.0	100.0	100.0	100.0
N	(100)	(100)	(100)	(100)

Elaboration Paradigm

Percentage receiving Ph.D. by getting married by sex (hypothetical)

	<u>Sex</u>			
	<u>Men</u>		<u>Women</u>	
<u>Got Ph.D.</u>	<u>Married</u>	<u>Didn't marry</u>	<u>Married</u>	<u>Didn't marry</u>
Yes	80.0	80.0	50.0	80.0
N	(100)	(100)	(100)	(100)

Make it succinct!

Elaboration Paradigm

<u>Percent delinquent by suitability of supervision</u>		
	<u>Suitability of supervision</u>	
	<u>Suitable</u>	<u>Unsuitable</u>
% Delinquent	30.3	83.7
N	(628)	(375)

Source: Eleanor Maccoby 1960 data (reprinted in Travis Hirschi and Hanan Selvin, 1967, *Delinquency Research: An Appraisal of Analytic Methods*, New York: Free Press, p. 240)

Elaboration Paradigm

Percent delinquent by suitability of supervision by mother's employment

	<u>Housewife</u>		<u>Occasionally Employed</u>		<u>Regularly employed</u>	
	<u>Suitable</u>	<u>Un- suitable</u>	<u>Suitable</u>	<u>Un- Suitable</u>	<u>Suitable</u>	<u>Un- Suitable</u>
% Delinquent	31.9	84.6	31.5	88.8	19.5	77.3
N	(457)	(149)	(89)	(116)	(82)	(110)

Source: Eleanor Maccoby 1960 data (reprinted in Travis Hirschi and Hanan Selvin, 1967, *Delinquency Research: An Appraisal of Analytic Methods*, New York: Free Press, p. 240)

Elaboration Paradigm

<u>Percentage delinquent by mother's employment</u>			
	<u>Housewife</u>	<u>Occasionally employed</u>	<u>Regularly employed</u>
% Delinquent	44.9	63.9	52.6
N	(606)	(205)	(192)

Source: Eleanor Maccoby 1960 data (reprinted in Travis Hirschi and Hanan Selvin, 1967, *Delinquency Research: An Appraisal of Analytic Methods*, New York: Free Press, p. 240)

Interpretation



Elaboration Paradigm

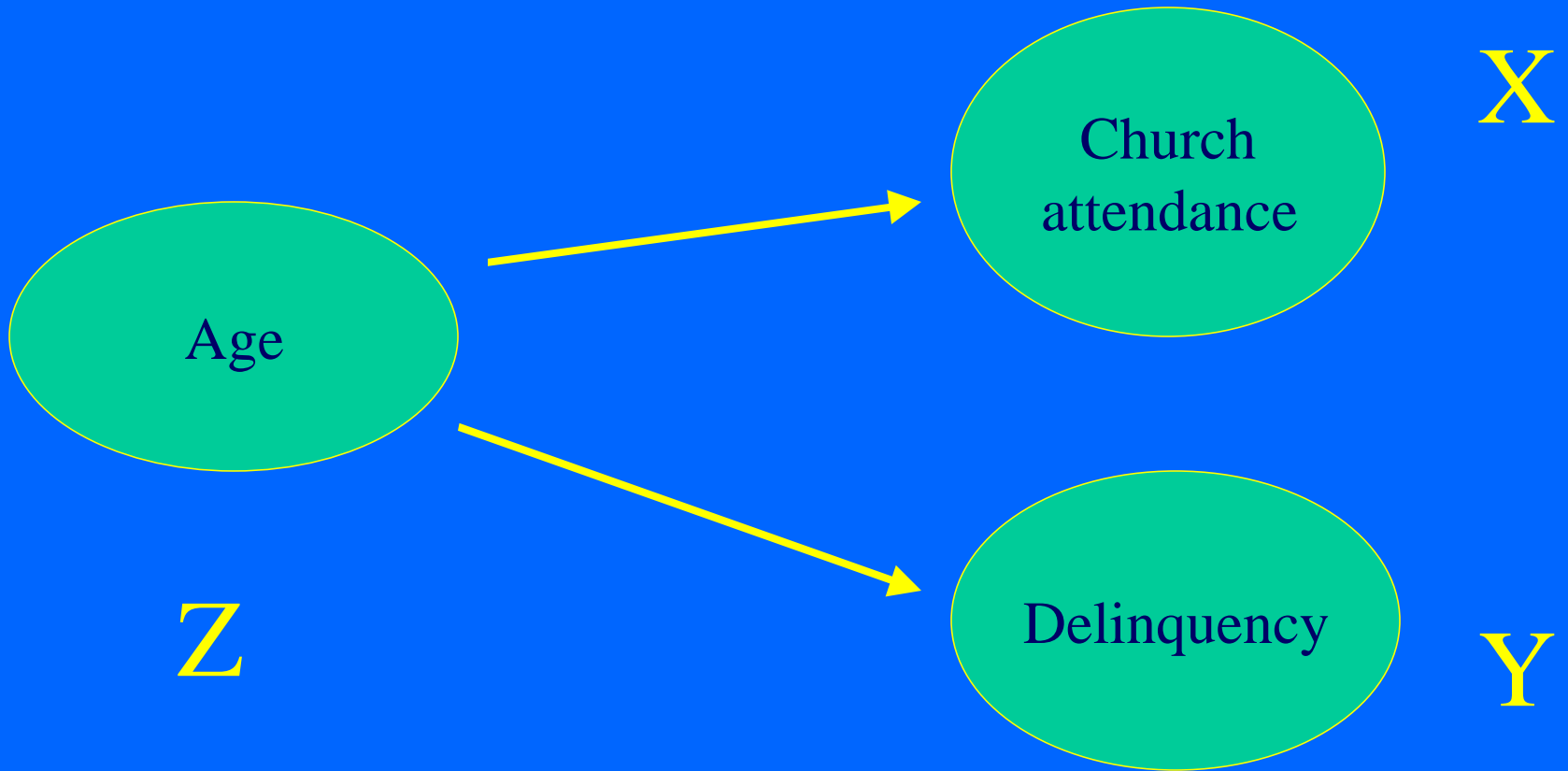
<u>Percent delinquent by church attendance (hypothetical)</u>		
	<u>Church attendance</u>	
	<u>Regular/often</u>	<u>Seldom/never</u>
% Delinquent	44.0	56.0
N	(150)	(150)

Elaboration Paradigm

Percent delinquent by church attendance by age

	<u><=14 years</u>		<u>>=15 years</u>	
	<u>Regular/ often</u>	<u>Seldom/ never</u>	<u>Regular/ often</u>	<u>Seldom/ never</u>
% Delinquent	33.0	33.0	67.0	67.0
N	(100)	(100)	(50)	(100)

Explanation



Testing hypotheses

Raw data: predicting traffic accidents

<u>Sex</u>	<u>Miles driven</u>	<u>Traffic accidents</u>	<u>N</u>
Women	Few	Many	20
Women	Few	Few	180
Women	Many	Many	80
Women	Many	Few	20
Men	Few	Many	5
Men	Few	Few	45
Men	Many	Many	160
Men	Many	Few	40

Original bivariate relationship

<u>Percentage of traffic accidents by sex (hypothetical)</u>		
<u>Accidents</u>	<u>Men</u>	<u>Women</u>
Few	34.0	66.7
Many	<u>66.0</u>	<u>33.3</u>
Total	100.0	100.0
N	(250)	(300)

Trivariate relationship

<u>Percentage of traffic accidents by miles driven by sex</u> (hypothetical)				
	<u>Sex</u>			
	<u>Men</u>		<u>Women</u>	
<u>Accidents</u>	<u>Few</u>	<u>Many</u>	<u>Few</u>	<u>Many</u>
Few	90.0	20.0	90.0	20.0
Many	<u>10.0</u>	<u>80.0</u>	<u>10.0</u>	<u>80.0</u>
Total	100.0	100.0	100.0	100.0
N	(50)	(200)	(200)	(100)

Interpretation



3 dimensional tables: basic table

Percentage believing abortion should be available by education and religion

	<u>Education</u>							
	<u><=8th</u>		<u>9-11 yrs.</u>		<u>H.S. grad</u>		<u>College+</u>	
<u>Abortion belief</u>	<u>Cath.</u>	<u>Prot.</u>	<u>Cath.</u>	<u>Prot.</u>	<u>Cath.</u>	<u>Prot.</u>	<u>Cath.</u>	<u>Prot.</u>
Should Be available	31.0	29.0	33.0	36.0	33.0	43.0	31.0	51.0
N	(90)	(287)	(96)	(250)	(89)	(256)	(75)	(225)

3-D table: statistical interaction

Percent believing abortion should be available by education and religion				
	<u>Education</u>			
<u>Religion</u>	<u><=8th</u>	<u>9-11 yrs</u>	<u>H.S. grad</u>	<u>College+</u>
Catholic	31.0 (90)	33.0 (96)	33.0 (89)	31.0 (75)
Protestant	29.0 (287)	36.0 (250)	43.0 (256)	51.0 (225)

Additive relationship (hypothetical)

	<u>Education</u>			
<u>Religion</u>	<u><=8th</u>	<u>9-11</u>	<u>H.S. grad</u>	<u>College+</u>
Catholic	30.0	35.0	45.0	65.0
Protestants	40.0	45.0	55.0	75.0