

LEC 5.3

AMOS GUIDEBOOK

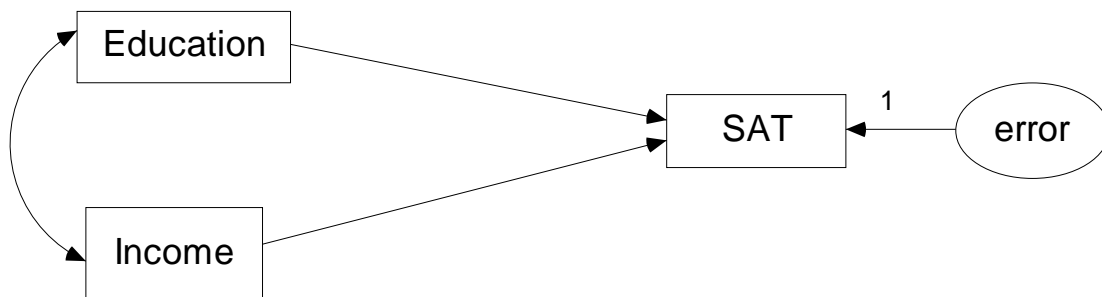
TUTORIAL: GETTING STARTED WITH AMOS GRAPHICS

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DATA

SAT	INCOME	EDUCATION
899	14.345	12.7
896	16.37	12.6
897	13.537	12.5
889	12.552	12.5
823	11.441	12.2
857	12.757	12.7
860	11.799	12.4
890	10.683	12.5
889	14.112	12.5
888	14.573	12.6
925	13.144	12.6
869	15.281	12.5
896	14.121	12.5
827	10.758	12.2
908	11.583	12.7
885	12.343	12.4
887	12.729	12.3
790	10.075	12.1
868	12.636	12.4
904	10.689	12.6
888	13.065	12.4

MODEL SPECIFICATION



INTRODUCTION TO VARIABLES

Your model contains the following variables (Group number 1)

Observed, endogenous variables

SAT

Observed, exogenous variables

Education

Income

Unobserved, exogenous variables

error

Variable counts (Group number 1)

Number of variables in your model: 4

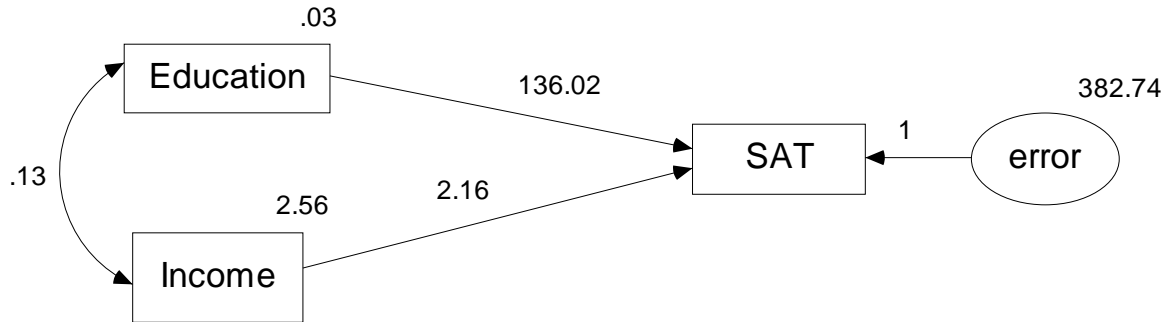
Number of observed variables: 3

Number of unobserved variables: 1

Number of exogenous variables: 3

Number of endogenous variables: 1

UN-STANDARDIZED ESTIMATES



Maximum Likelihood Estimates

	Estimate	S.E.	C.R.	P	Label
SAT<--- Education	136.022	30.555	4.452	***	
SAT<--- Income	2.156	3.125	.690	.490	

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Education<-->Income	.127	.065	1.952	.051	

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Education	.027	.008	3.162	.002	
Income	2.562	.810	3.162	.002	
error	382.736	121.032	3.162	.002	

HYPOTHESIS SETTING

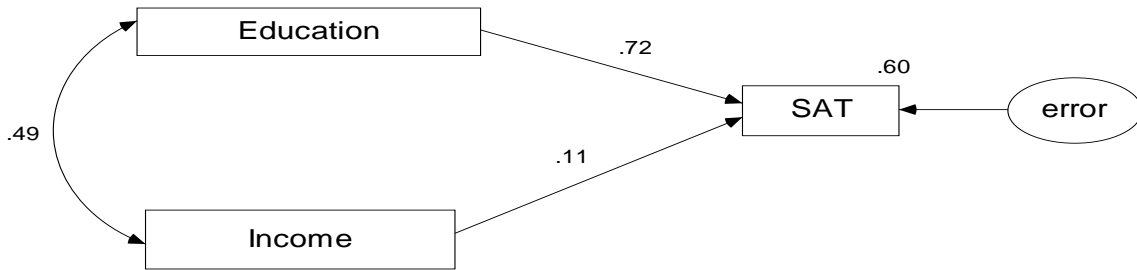
Null hypothesis H_0 : There is no covariance between the two variables

Alternative Hypothesis H_1 : Yes there is co-variance

DECISION

Education and income has no covariance in the population.

STANDARDIZED ESTIMATES



Standardized Regression Weights: (Group number 1 - Default model)

	Estimate
SAT<--- Education	.717
SAT<--- Income	.111

Correlations: (Group number 1 - Default model)

	Estimate
Education<--> Income	.485

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
SAT	.603

HYPOTHESIS SETTING

Null hypothesis H_0 : There is no correlation between the two variables

Alternative Hypothesis H_1 : Yes there is correlation.

DECISION

We can not take decision about population correlation as there is no p value. But we can take decision about sample correlation which is 0.485

END OF LECTURE