Data: GSS93subset
SPSS: Analyze → Regress → Linear

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Highest Year of School Completed[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Hours Per Day Watching TV

PRE (8.4% reduction · Explains 8.4%)
Adjusted for the number of independent variables and sample size

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.289[a]	.084	.083	2.138

a. Predictors: (Constant), Highest Year of School Completed

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	619.658	1	619.658	135.524	.000[a]
	Residual	6780.743	1483	4.572		
	Total	7400.401	1484			

Significance of the model

a. Predictors: (Constant), Highest Year of School Completed

b. Dependent Variable: Hours Per Day Watching TV

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.636	.242		23.292	.000
	Highest Year of School Completed	-.210	.018	-.289	-11.641	.000

Significance for the IV

a. Dependent Variable: Hours Per Day Watching TV

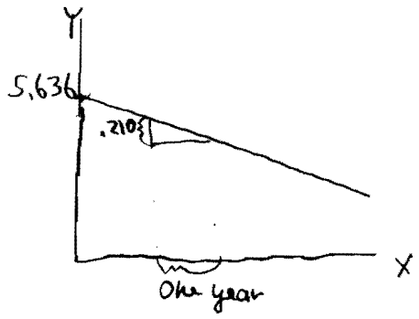
Intercept

Slope

One year increase in educ is associated with .2 hour decrease in watching TV.

(significant since $p < .01$)

$Y = 5.636 - .210X$



Predicted value of Y

when $X = 9$

$Y = 5.636 - .210(9)$

$= 3.746$

when $X = 10$

$Y = 5.636 - .210(10)$

$= 3.536$

(The difference is $-.210$)

Controlling for another variable
Multiple Regression

Regression

9.4% reduction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.309[a]	.095	.094	1.984

a. Predictors: (Constant), Respondent Socioeconomic Index, Highest Year of School Completed

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	581.298	2	290.649	73.850	.000[a]
	Residual	5525.691	1404	3.936		
	Total	6106.989	1406			

a. Predictors: (Constant), Respondent Socioeconomic Index, Highest Year of School Completed

b. Dependent Variable: Hours Per Day Watching TV

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.496	.235		23.411	.000
	Highest Year of School Completed (slope)	-.161	.021	-.235	-7.520	.000 ← Significant
	Respondent Socioeconomic Index (slope)	-.012	.003	-.105	-3.339	.001 ← Significant

a. Dependent Variable: Hours Per Day Watching TV

$Y = 5.496 - .161X1 - .012X2$