

Example of lavaan

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Input

```
> library(lavaan)
> load("mydata.Rdata")
> attach(mydata)
> Data <- data.frame(educf, IQ, arith1)
> PathModel <- "
+           arith1 ~ educf + IQ
+           IQ ~ educf
+           "
>
> fit <- sem(PathModel, data=Data)
> summary(fit, standardized=TRUE, fit.measures=TRUE)
```

Output

lavaan (0.4-11) converged normally after 29 iterations

Number of observations	150
Estimator	ML
Minimum Function Chi-square	0.000
Degrees of freedom	0
P-value	1.000

Chi-square test baseline model:

Minimum Function Chi-square	48.621
Degrees of freedom	3
P-value	0.000

Full model versus baseline model:

Comparative Fit Index (CFI)	1.000
Tucker-Lewis Index (TLI)	1.000

Loglikelihood and Information Criteria:

Loglikelihood user model (H0)	-1179.032
Loglikelihood unrestricted model (H1)	-1179.032
Number of free parameters	5
Akaike (AIC)	2368.064
Bayesian (BIC)	2383.117
Sample-size adjusted Bayesian (BIC)	2367.293

Root Mean Square Error of Approximation:

RMSEA	0.000
90 Percent Confidence Interval	0.000 0.000
P-value RMSEA <= 0.05	1.000

Standardized Root Mean Square Residual:

SRMR	0.000
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Parameter estimates:

Information	Expected					
Standard Errors	Standard					
	Estimate	Std.err	Z-value	P(> z)	Std.lv	Std.all
Regressions:						
arith1 ~						
educf	2.611	0.867	3.012	0.003	2.611	0.209
IQ	0.503	0.071	7.043	0.000	0.503	0.490
IQ ~						
educf	-0.471	0.989	-0.476	0.634	-0.471	-0.039
Variances:						
arith1	48.811	5.636			48.811	0.724
IQ	63.685	7.354			63.685	0.998