


```
-----+-----
Total | 20.5420956 199 .103226611
Adj R-squared = 0.1200
Root MSE = .30139
```

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dep_var						
med_var	.1744282	.0773596	2.25	0.025	.021869	.3269875
indep_var	.2999108	.0788923	3.80	0.000	.144329	.4554927
_cons	.4482431	.0560093	8.00	0.000	.3377884	.5586977

the b coefficient

the direct effect

Sobel-Goodman Mediation Tests

	Coef	Std Err	Z	P> Z
Sobel	.06244281	.03011738	2.073	.03814301
Goodman-1 (Aroian)	.06244281	.03057152	2.043	.04110038
Goodman-2	.06244281	.0296563	2.106	.03524347

These three are replaced by the bootstrapping analysis

	Coef	Std Err	Z	P> Z
a coefficient =	.357986	.067863	5.27513	1.3e-07
b coefficient =	.174428	.07736	2.25477	.024148
Indirect effect =	.062443	.030117	2.07331	.038143
Direct effect =	.299911	.078892	3.80152	.000144
Total effect =	.362354	.07463	4.85534	1.2e-06

This section is a handy summary for everything except the Indirect Effect.

For the Indirect Effect, only the coefficient is correct. (It is calculated simply a x b or Total Effect - Direct Effect.) The Std. Error, Z, and P columns for the Indirect Effect are replaced by the bootstrapping analysis described below.

Proportion of total effect that is mediated: .1723256
 Ratio of indirect to direct effect: .20820458
 Ratio of total to direct effect: 1.2082046

The dots that show the progress of the bootstrapping analysis can be suppressed from the output by adding **nodots** here.

```
. bootstrap r(ind_eff), reps(5000): sgmediation dep_var, iv(indep_var) mv(med_var)
(running sgmediation on estimation sample)
```

```
Bootstrap replications (5000)
-----+----- 1 ----- 2 ----- 3 ----- 4 ----- 5
.....
.....
.....
[some output omitted]
..... 4900
..... 4950
..... 5000
```

The confidence interval can be changed from the 95% default to 99% by adding **level(99)** here.

```
Bootstrap results          Number of obs    =    200
                          Replications        =    5000
```

```
command: sgmediation dep_var, iv(indep_var) mv(med_var)
         _bs_1: r(ind_eff)
```

To be ignored for our purposes

	Observed Coef.	Bootstrap Std. Err.	z	P> z	Normal-based [95% Conf. Interval]	
_bs_1	.0624428	.0312969	2.00	0.046	.001102	.1237836

```
.  
. estat bootstrap, percentile
```

```
Bootstrap results          Number of obs   =    200  
                          Replications     =    5000
```

```
command: sgmediation dep_var, iv(indep_var) mv(med_var)  
_bs_1: r(ind_eff)
```

	Observed		Bootstrap		
	Coef.	Bias	Std. Err.	[95% Conf. Interval]	
_bs_1	.06244281	.0002222	.03129692	.0074044	.1296649 (P)

(P) percentile confidence interval

This is the calculated estimate (the same as in the sgmediation analysis above)

This confidence interval corresponds to the Preacher and Hayes SPSS confidence interval. If this interval does not include zero, the indirect effect is statistically significant.

See Zhao et al. 2010 (JCR) for more about the substantive interpretation of a bootstrapped mediation analysis.