

Salary and Publications Example (Cohen, Cohen, West, & Aiken Table 3.2.1)

Syntax

```
get file='c:\jason\spsswin\da2\ccwa3_2_1.sav'.

correlations vars=pubs time salary.

regression vars=salary time pubs
  /descriptives=mean stdev
  /statistics=anova coeff ses r ci
  /dependent=salary
  /method=enter pubs time.
```

Correlations

Correlations

		PUBS number of publications	TIME years since PhD	SALARY annual salary in dollars
PUBS number of publications	Pearson Correlation	1	.657	.588
	Sig. (2-tailed)	.	.008	.021
	N	15	15	15
TIME years since PhD	Pearson Correlation	.657	1	.710
	Sig. (2-tailed)	.008	.	.003
	N	15	15	15
SALARY annual salary in dollars	Pearson Correlation	.588	.710	1
	Sig. (2-tailed)	.021	.003	.
	N	15	15	15

Regression

Variables Entered/Removed^d

Model	Variables Entered	Variables Removed	Method
1	PUBS number of publications, TIME years since PhD ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: SALARY annual salary in dollars

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.728 ^a	.530	.452	5839.23054

a. Predictors: (Constant), PUBS number of publications, TIME years since PhD

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.62E+08	2	231159410.2	6.780	.011 ^a
	Residual	4.09E+08	12	34096613.27		
	Total	8.71E+08	14			

a. Predictors: (Constant), PUBS number of publications, TIME years since PhD

b. Dependent Variable: SALARY annual salary in dollars

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta	Std. Error			Lower Bound	Upper Bound
1	(Constant)	43082.394	3099.493			13.900	.000	36329.178	49835.610
	TIME years since PhD	982.867	452.057	.570	.262	2.174	.050	-2.081	1967.815
	PUBS number of publications	121.801	149.699	.213	.262	.814	.432	-204.364	447.966

a. Dependent Variable: SALARY annual salary in dollars

To examine whether the number of publications was independently associated with annual academic salary after controlling for the number of years since receiving the doctorate, a simultaneous multiple regression analysis was conducted. Results indicated that the number of publications did not independently predict salary, $b = 121.80$, $SE_b = 149.70$, $\beta = .213$, ns. Years since receiving a Ph.D. was marginally significantly related to salary, $b = 982.87$, $SE_b = 452.06$, $b = .57$, $p = .05$, indicating that salary increased by approximately \$982 for each additional year since receiving the doctorate. Overall, the number of publications and years since Ph.D. accounted for over 50% of the variance in salary, $R^2 = .530$, $F(2,12) = 6.78$, $p < .05$.