

Regression (Tutor01 BC=1, FC=0; Item201 A=0, B=1)

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	PRETEST, TUTOR01, ITEM201 ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: POSTTEST

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.423	.387	.1890922

a. Predictors: (Constant), PRETEST, TUTOR01, ITEM201

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.259	3	.420	11.740	.000 ^a
	Residual	1.716	48	.036		
	Total	2.976	51			

a. Predictors: (Constant), PRETEST, TUTOR01, ITEM201

b. Dependent Variable: POSTTEST

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.592	.064		9.223	.000
	TUTOR01	-.118	.053	-.247	-2.232	.030
	ITEM201	-.234	.055	-.489	-4.236	.000
	PRETEST	.516	.121	.495	4.262	.000

a. Dependent Variable: POSTTEST

Univariate Analysis of Variance (Parallelism check)

Between-Subjects Factors

	N
TUTOR BC	26
FC	26

Descriptive Statistics

Dependent Variable: POSTTEST

TUTOR	Mean	Std. Deviation	N
BC	.559544	.2039039	26
FC	.705265	.2576926	26
Total	.632404	.2415475	52

Tests of Between-Subjects Effects

Dependent Variable: POSTTEST

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.196 ^a	5	.239	6.181	.000
Intercept	1.331	1	1.331	34.394	.000
TUTOR * PRETEST	.611	2	.306	7.899	.001
TUTOR * ITEM201	.052	2	.026	.667	.518
PRETEST * ITEM201	.029	1	.029	.738	.395
Error	1.780	46	.039		
Total	23.772	52			
Corrected Total	2.976	51			

a. R Squared = .402 (Adjusted R Squared = .337)

Univariate Analysis of Variance (Posttest Item & Pretest as covariates)

Between-Subjects Factors

	N
TUTOR BC	26
FC	26

Descriptive Statistics

Dependent Variable: POSTTEST

TUTOR	Mean	Std. Deviation	N
BC	.559544	.2039039	26
FC	.705265	.2576926	26
Total	.632404	.2415475	52

Tests of Between-Subjects Effects

Dependent Variable: POSTTEST

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.259 ^b	3	.420	11.740	.000	.423
Intercept	3.227	1	3.227	90.263	.000	.653
PRETEST	.650	1	.650	18.168	.000	.275
ITEM201	.642	1	.642	17.947	.000	.272
TUTOR	.178	1	.178	4.982	.030	.094
Error	1.716	48	.036			
Total	23.772	52				
Corrected Total	2.976	51				

Tests of Between-Subjects Effects

Dependent Variable: POSTTEST

Source	Noncent. Parameter	Observed Power ^a
Corrected Model	35.220	.999
Intercept	90.263	1.000
PRETEST	18.168	.987
ITEM201	17.947	.986
TUTOR	4.982	.590
Error		
Total		
Corrected Total		

a. Computed using alpha = .05

b. R Squared = .423 (Adjusted R Squared = .387)

Parameter Estimates

Dependent Variable: POSTTEST

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval		Partial Eta Squared
					Lower Bound	Upper Bound	
Intercept	.592	.064	9.223	.000	.463	.721	.639
PRETEST	.516	.121	4.262	.000	.273	.759	.275
ITEM201	-.234	.055	-4.236	.000	-.345	-.123	.272
[TUTOR=BC]	-.118	.053	-2.232	.030	-.224	-.012	.094
[TUTOR=FC]	0 ^b

Parameter Estimates

Dependent Variable: POSTTEST

Parameter	Noncent. Parameter	Observed Power ^a
Intercept	9.223	1.000
PRETEST	4.262	.987
ITEM201	4.236	.986
[TUTOR=BC]	2.232	.590
[TUTOR=FC]	.	.

a. Computed using alpha = .05

b. This parameter is set to zero because it is redundant.

Estimated Marginal Means

TUTOR

Estimates

Dependent Variable: POSTTEST

TUTOR	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
BC	.573 ^a	.037	.499	.648
FC	.691 ^a	.037	.617	.766

a. Covariates appearing in the model are evaluated at the following values: PRETEST = .419225, ITEM201 = .50.

Pairwise Comparisons

Dependent Variable: POSTTEST

(I) TUTOR	(J) TUTOR	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
BC	FC	-.118*	.053	.030	-.224	-.012
FC	BC	.118*	.053	.030	.012	.224

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: POSTTEST

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	.178	1	.178	4.982	.030	.094
Error	1.716	48	.036			

The F tests the effect of TUTOR. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Univariate Tests

Dependent Variable: POSTTEST

	Noncent. Parameter	Observed Power ^a
Contrast	4.982	.590
Error		

The F tests the effect of TUTOR. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05