Your temporary usage period for IBM SPSS Statistics will expire in 9 days.

GET

FILE='/Users/keithmccormick/Desktop/Resources/Case Study Data/MWBank with Dummy Code and Interaction Terms.sav'.

DATASET NAME DataSet1 WINDOW=FRONT.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA CHANGE ZPP

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT salbeg

/METHOD=ENTER work educ\_cen

/METHOD=ENTER ot\_yn so\_yn ct\_yn exempt\_yn mba\_yn tech\_yn

/METHOD=ENTER sex

/METHOD=ENTER ed\_sex

/PARTIALPLOT ALL

/SCATTERPLOT (\*ZRESID ,\*ZPRED)

/RESIDUALS HISTOGRAM(ZRESID).

## Regression

#### **Notes**

Output Created		07-MAR-2018 14:58	
Comments			
Input	Data	/Users/keithmccormick/ Desktop/Resources/Cas e Study Data/MWBank with Dummy Code and Interaction Terms.sav	
	Active Dataset	DataSet1	
	File Label	SPSS/PC+	
	Filter	<none></none>	
	Weight	<none></none>	
	Split File	<none></none>	
	N of Rows in Working Data File	474	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on cases with no missing values for any variable used.	

#### Notes

Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT salbeg /METHOD=ENTER work educ_cen /METHOD=ENTER ot_yn so_yn ct_yn exempt_yn mba_yn tech_yn /METHOD=ENTER sex /METHOD=ENTER ed_sex /PARTIALPLOT ALL /SCATTERPLOT= (*ZRESID, *ZPRED) /RESIDUALS HISTOGRAM(ZRESID).
Resources	Processor Time	00:00:03.60
	Elapsed Time	00:00:03.00
	Memory Required	9920 bytes
	Additional Memory Required for Residual Plots	5952 bytes

[DataSet1] /Users/keithmccormick/Desktop/Resources/Case Study Data/MWBank with Dummy Code and Interaction Terms.sav

# Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	educ_cen, Work Experience <sup>b</sup>		Enter
2	mba_yn, tech_yn, ot_yn, exempt_yn, so_yn, ct_yn <sup>b</sup>		Enter
3	Sex of Employee <sup>b</sup>		Enter
4	ed_sex <sup>b</sup>		Enter

- a. Dependent Variable: Beginning Salary
- b. All requested variables entered.

# Model Summary <sup>e</sup>

					Change Statistics		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.671 <sup>a</sup>	.450	.448	2340.614	.450	191.888	2
2	.888 <sup>b</sup>	.788	.784	1463.557	.338	122.756	6
3	.898 <sup>c</sup>	.807	.803	1397.248	.019	45.988	1
4	.900 <sup>d</sup>	.811	.806	1385.568	.004	8.821	1

# Model Summary <sup>e</sup>

#### **Change Statistics**

Model	df2	Sig. F Change
1	469	.000
2	463	.000
3	462	.000
4	461	.003

- a. Predictors: (Constant), educ\_cen, Work Experience
- b. Predictors: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn, ct\_yn
- c. Predictors: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn, ct\_yn, Sex of Employee
- d. Predictors: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn, ct\_yn, Sex of Employee, ed\_sex

\_

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.103E+9	2	1.051E+9	191.888	.000 <sup>b</sup>
	Residual	2.569E+9	469	5478474.80		
	Total	4.672E+9	471			
2	Regression	3.680E+9	8	460020387	214.762	.000°
	Residual	991745669	463	2141999.28		
	Total	4.672E+9	471			
3	Regression	3.770E+9	9	418882837	214.558	.000 <sup>d</sup>
	Residual	901963235	462	1952301.37		
	Total	4.672E+9	471			
4	Regression	3.787E+9	10	378688094	197.254	.000 <sup>e</sup>
	Residual	885027821	461	1919800.05		
	Total	4.672E+9	471			

- a. Dependent Variable: Beginning Salary
- b. Predictors: (Constant), educ\_cen, Work Experience
- c. Predictors: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn, ct\_yn
- d. Predictors: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn, ct\_yn, Sex of Employee
- e. Predictors: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn,

# **Coefficients**<sup>a</sup>

#### Model: 4

	Unstandardized Coefficients		Standardized Coefficients			Correlations
	В	Std. Error	Beta	t	Sig.	Zero-order
(Constant)	6127.095	148.680		41.210	.000	
Work Experience	26.754	9.144	.074	2.926	.004	.045
educ_cen	311.626	41.578	.285	7.495	.000	.635
ot_yn	25.298	161.185	.004	.157	.875	271
so_yn	272.329	348.964	.020	.780	.436	062
ct_yn	2907.417	271.374	.260	10.714	.000	.308
exempt_yn	5787.811	302.959	.462	19.104	.000	.552
mba_yn	5489.369	648.394	.179	8.466	.000	.198
tech_yn	12054.940	607.339	.429	19.849	.000	.475
Sex of Employee	-1073.134	151.385	170	-7.089	.000	454
ed_sex	-166.834	56.171	087	-2.970	.003	.268

# **Coefficients**<sup>a</sup>

#### Model: 4

#### Correlations

	Partial	Part
(Constant)		
Work Experience	.135	.059
educ_cen	.330	.152
ot_yn	.007	.003
so_yn	.036	.016
ct_yn	.446	.217
exempt_yn	.665	.387
mba_yn	.367	.172
tech_yn	.679	.402
Sex of Employee	314	144
ed_sex	137	060

a. Dependent Variable: Beginning Salary

#### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	ot_yn	146 <sup>b</sup>	-4.005	.000	182	.856
	so_yn	.038 <sup>b</sup>	.956	.340	.044	.745
	ct_yn	.100 <sup>b</sup>	2.724	.007	.125	.853
	exempt_yn	.346 <sup>b</sup>	10.321	.000	.431	.852
	mba_yn	.098 <sup>b</sup>	2.846	.005	.130	.974
	tech_yn	.349 <sup>b</sup>	11.170	.000	.459	.951
	Sex of Employee	213 <sup>b</sup>	-5.774	.000	258	.803
	ed_sex	254 <sup>b</sup>	-5.934	.000	265	.597
2	Sex of Employee	163 <sup>c</sup>	-6.781	.000	301	.723
	ed_sex	068 <sup>c</sup>	-2.196	.029	102	.481
3	ed_sex	087 <sup>d</sup>	-2.970	.003	137	.476

- a. Dependent Variable: Beginning Salary
- b. Predictors in the Model: (Constant), educ\_cen, Work Experience
- c. Predictors in the Model: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn, ct\_yn
- d. Predictors in the Model: (Constant), educ\_cen, Work Experience, mba\_yn, tech\_yn, ot\_yn, exempt\_yn, so\_yn, ct\_yn, Sex of Employee

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4257.60	20506.45	6818.37	2835.505	472
Residual	-5742.235	11652.438	.000	1370.781	472
Std. Predicted Value	903	4.827	.000	1.000	472
Std. Residual	-4.144	8.410	.000	.989	472

a. Dependent Variable: Beginning Salary

### **Charts**

# Dependent Variable: Beginning Salary Mean =-5.89E-16 Std. Dev. =0.989 N = 472

**Regression Standardized Residual** 

- 5

# 

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**Regression Standardized Predicted Value** 

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