6/12/24, 1:42 PM Results: Assign8\_1.sas

### **Diversity Data: Training the model**

### **Model for Job Satisfaction (Explanatory Data)**

The REG Procedure
Model: MODEL1
Dependent Variable: satis sum of satisfaction

Number of Observations Read	1000
Number of Observations Used	471
Number of Observations with Missing Values	529

Analysis of Variance						
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F	
Model	4	2818.95457	704.73864	90.58	<.0001	
Error	466	3625.81401	7.78072			
Corrected Total	470	6444.76858				

Root MSE	2.78939	R-Square	0.4374
Dependent Mean	14.78769	Adj R-Sq	0.4326
Coeff Var	18.86295		

Parameter Estimates								
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr >  t		
Intercept	Intercept	1	3.14157	0.83473	3.76	0.0002		
rlnC	sum of relations with colleagues	1	0.11140	0.04600	2.42	0.0158		
rlnM	sum of relations with managers	1	0.06051	0.01685	3.59	0.0004		
fair	sum of fair oppurtunites for advancement	1	0.33468	0.03597	9.30	<.0001		
VisMinority1	Visible Minority	1	-0.94482	0.28033	-3.37	0.0008		

## **Diversity Data: Training the model**

### **Predictions for replication data**

Obs	id	rInC	rlnM	fair	VisMinority1	satis2	PredictedY	LowerLimit	UpperLimit
501	501	16	40	7	0	7	9.6871	4.1336	15.2405
502	502	22	54	24	1	15	15.9473	10.4421	21.4525
503	503	20	37	19	1	8	13.0225	7.5159	18.5291
504	504	24	41	18	0	16	14.3202	8.8169	19.8235
505	505	20	59	24	0	19	16.9719	11.4654	22.4783
506	506	25	58	26	0	19	18.1377	12.6376	23.6378
507	507	22	48	24	0	16	16.5291	11.0360	22.0221
508	508	23	54	25	0	14	17.3382	11.8436	22.8328
509	509	16	37	17	1	12	11.9075	6.3931	17.4219
510	510	21	48	20	0	13	15.0790	9.5880	20.5699

**Diversity Data: Training the model** 

#### Results: Assign8\_1.sas

# How many values were captured in interval? accuracy of 94.19%

### The FREQ Procedure

Frequency Percent Row Pct Col Pct

Table of interval by sample							
	sample(1 = original data 2 = replicated data)						
interval	1	2	Total				
N	25	30	55				
	2.64	3.17	5.81				
	45.45	54.55					
	5.31	6.30					
Υ	446	446	892				
	47.10	47.10	94.19				
	50.00	50.00					
	94.69	93.70					
Total	471	476	947				
	49.74	50.26	100.00				
Frequency Missing = 53							