STATCRUNCH OUTPUT TO BE USED TO ANSWER THE QUESTIONS FOR PART D

Supplemental Tables 1-6 are to be used to aid you with your interpretation of Project Analyses 1 and 2 and in subsequently answering the questions related to Project Analyses 1 and 2.

Supplemental Table 1: Summary Statistics for Pre Bully
Grouped by: Classification

Classification	n	Mean	Std. Dev.	Std. Err.	Median	Range	Min	Max
Bully	30	3.2666667	1.7603552	0.32139543	3	7	1	8
Bully/Victim	30	8.633333	2.941772	0.5370917	8	13	3	16
Victim	30	20.4	6.071982	1.1085871	20	23	11	34

Supplemental Table 2: Summary Statistics for Post Bully
Grouped by: Classification

Classification	n	Mean	Std. Dev.	Std. Err.	Median	Range	Min	Max
Bully	30	2.7	1.7840288	0.3257176	3	6	0	6
Bully/Victim	30	6.8	2.4968946	0.4558685	6.5	11	1	12
Victim	30	15.533334	6.7911367	1.2398863	16	34	0	34

Supplemental Table 3: Summary Statistics for Pre School Environment
Grouped by: Classification

Classification	n	Mean	Std. Dev.	Std. Err.	Median	Range	Min	Max
Bully	30	26.433332	6.6316032	1.2107595	25.5	27	12	39
Bully/Victim	30	26.133333	5.335201	0.97406995	26	22	16	38
Victim	30	26.133333	6.3719935	1.1633615	27	24	13	37

Supplemental Table 4: Summary statistics for Post School Environment
Grouped by: Classification

Classification	n	Mean	Std. Dev.	Std. Err.	Median	Range	Min	Max
Bully	30	18.533333	5.6552286	1.0324987	18.5	19	8	27
Bully/Victim	30	23.333334	5.0741625	0.9264111	24	23	10	33
Victim	30	32.733334	4.733835	0.8642761	33.5	23	21	44

Supplemental Table 5: Paired t-Test between Pre and Post Bully Means
$\mu_1 - \mu_2$: mean of the paired difference between Post Bully and Pre Bully
$H_0 : \mu_1 - \mu_2 = 0$
$H_A : \mu_1 - \mu_2 \neq 0$
Grouped by : Classification

Classification	Sample Diff.	Std. Err.	DF	T-Stat	P-value
Bully	-0.56666666	0.45658234	29	-1.2411051	0.2245
Bully/Victim	-1.8333334	0.6416275	29	-2.8573174	0.0078
Victim	-4.866667	1.5556595	29	-3.1283622	0.004

Supplemental Table 6: Paired t-Test between Pre and Post School Environment Means
$\mu_1 - \mu_2$: mean of the paired difference between Post Sch and Pre Sch
$H_0 : \mu_1 - \mu_2 = 0$
$H_A : \mu_1 - \mu_2 \neq 0$
Grouped by : Classification

Classification	Sample Diff.	Std. Err.	DF	T-Stat	P-value
Bully	-7.9	0.8281679	29	-9.539128	<0.0001
Bully/Victim	-2.8	0.530452	29	-5.2785172	<0.0001
Victim	6.6	0.6514352	29	10.131475	<0.0001

PROJECT ANALYSIS 1

Responses stored in Post Bully - Pre Bully.
Factors stored in Classification.
Factor means

Classification	n	Mean	Std. Error
Bully	30	-0.56666666	0.45658234
Bully/Victim	30	-1.8333334	0.6416275
Victim	30	-4.866667	1.5556595

ANOVA table

Source	df	SS	MS	F-Stat	P-value
Treatments	2	292.95557	146.47778	4.8179836	0.0104
Error	87	2645	30.402298		
Total	89	2937.9556			

Tukey 95% Simultaneous Confidence Intervals

Bully subtracted from

	Lower	Upper
Bully/Victim	-4.6613684	2.1280353
Victim	-7.694702	-0.90529805

Bully/Victim subtracted from

	Lower	Upper
Victim	-6.4280353	0.3613686

PROJECT ANALYSIS 2

Responses stored in Post Sch - Pre Sch.
Factors stored in Classification.
Factor means

Classification	n	Mean	Std. Error
Bully	30	-7.9	0.8281679
Bully/Victim	30	-2.8	0.530452
Victim	30	6.6	0.6514352

ANOVA table

Source	df	SS	MS	F-Stat	P-value
Treatments	2	3246.2	1623.1	116.63476	<0.0001
Error	87	1210.7	13.916092		
Total	89	4456.9			

Tukey 95% Simultaneous Confidence Intervals

Bully subtracted from

	Lower	Upper
Bully/Victim	2.8032851	7.3967147
Victim	12.203285	16.796715

Bully/Victim subtracted from

	Lower	Upper
Victim	7.1032853	11.696714

PROJECT ANALYSIS 3
Rows: Family
Columns: Classification

Cell format
Count (Row percent) (Column percent) Expected count

	Bully	Bully/Victim	Victim	Total
Negative	20 (50%) (66.67%) 13.33	15 (37.5%) (50%) 13.33	5 (12.5%) (16.67%) 13.33	40 (100.00%) (44.44%)
Positive	10 (20%) (33.33%) 16.67	15 (30%) (50%) 16.67	25 (50%) (83.33%) 16.67	50 (100.00%) (55.56%)
Total	30 (33.33%) (100.00%)	30 (33.33%) (100.00%)	30 (33.33%) (100.00%)	90 (100.00%) (100.00%)

Statistic	DF	Value	P-value
Chi-square	2	15.75	0.0004

PROJECT ANALYSIS 4
Rows: Gender
Columns: Family

Cell format
Count (Row percent) (Column percent) Expected count

	Negative	Positive	Total
Female	19 (42.22%) (47.5%) 20	26 (57.78%) (52%) 25	45 (100.00%) (50%)
Male	21 (46.67%) (52.5%) 20	24 (53.33%) (48%) 25	45 (100.00%) (50%)
Total	40 (44.44%) (100.00%)	50 (55.56%) (100.00%)	90 (100.00%) (100.00%)

Statistic	DF	Value	P-Value
Chi-square	1	0.18	0.6714

PROJECT ANALYSIS 5

Correlation matrix:

	Gender	Family	Pre Bully	Post Bully	Pre Sch
Family	0.04472136 (0.6756)				
Pre Bully	0.063862644 (0.5498)	0.313555 (0.0026)			
Post Bully	-0.047234215 (0.6584)	0.34016573 (0.001)	0.72387415 (<0.0001)		
Pre Sch	-0.07546039 (0.4796)	0.66423804 (<0.0001)	0.0080801835 (0.9397)	-0.0014119353 (0.9895)	
Post Sch	-0.18269019 (0.0848)	0.67116535 (<0.0001)	0.67428577 (<0.0001)	0.6400367 (<0.0001)	0.5056536 (<0.0001)

PROJECT ANALYSIS 6

Correlation matrix:

	Rank(Pre Bully)	Rank(Post Bully)	Rank(Pre Sch)
Rank(Post Bully)	0.7405817 (<0.0001)		
Rank(Pre Sch)	0.022838008 (0.8308)	-0.00463141 (0.9654)	
Rank(Post Sch)	0.69998693 (<0.0001)	0.6146027 (<0.0001)	0.49280354 (<0.0001)

PROJECT ANALYSIS 7

Dependent Variable: Post Sch
Independent Variable: Pre Bully
Post Sch = 17.95522 + 0.64193016 Pre Bully
Sample size: 90
R (correlation coefficient) = 0.6743
R-sq = 0.4546613
Estimate of error standard deviation: 5.81387

Parameter estimates:

Parameter	Estimate	Std. Err.	DF	T-Stat	P-Value
Intercept	17.95522	1.0132358	88	17.720673	<0.0001
Slope	0.64193016	0.07494378	88	8.56549	<0.0001

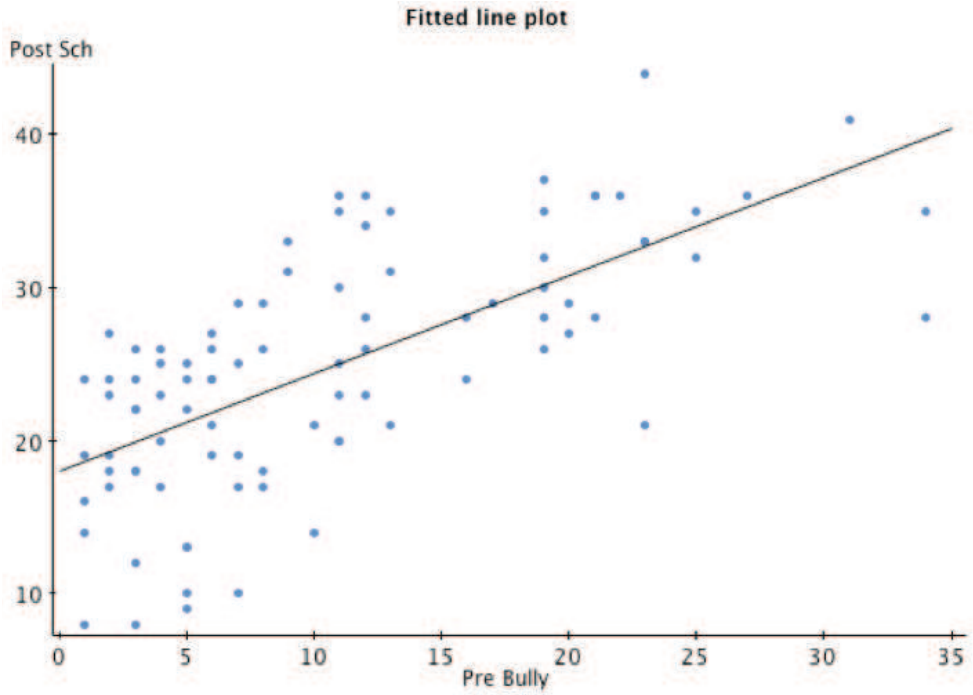
Analysis of variance table for regression model:

Source	DF	SS	MS	F-stat	P-value
Model	1	2479.9045	2479.9045	73.36761	<0.0001
Error	88	2974.4954	33.801083		
Total	89	5454.4			

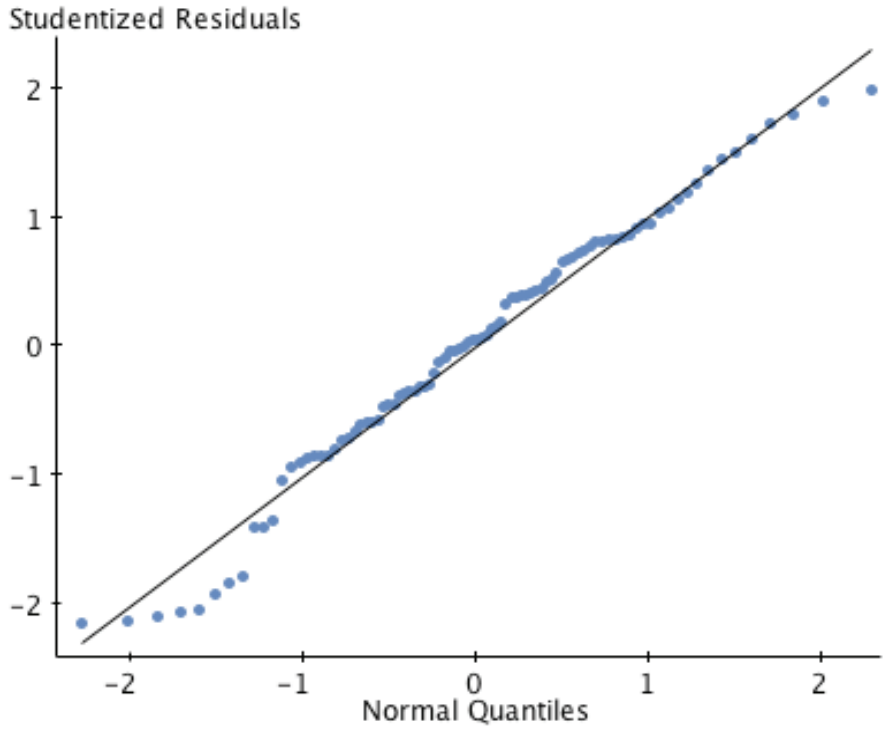
Predicted values:

X value	Pred. Y	s.e.(Pred. y)	95% C.I.	95% P.I.
10	24.37452	0.6155233	(23.151297, 25.597744)	(12.7561035, 35.992935)

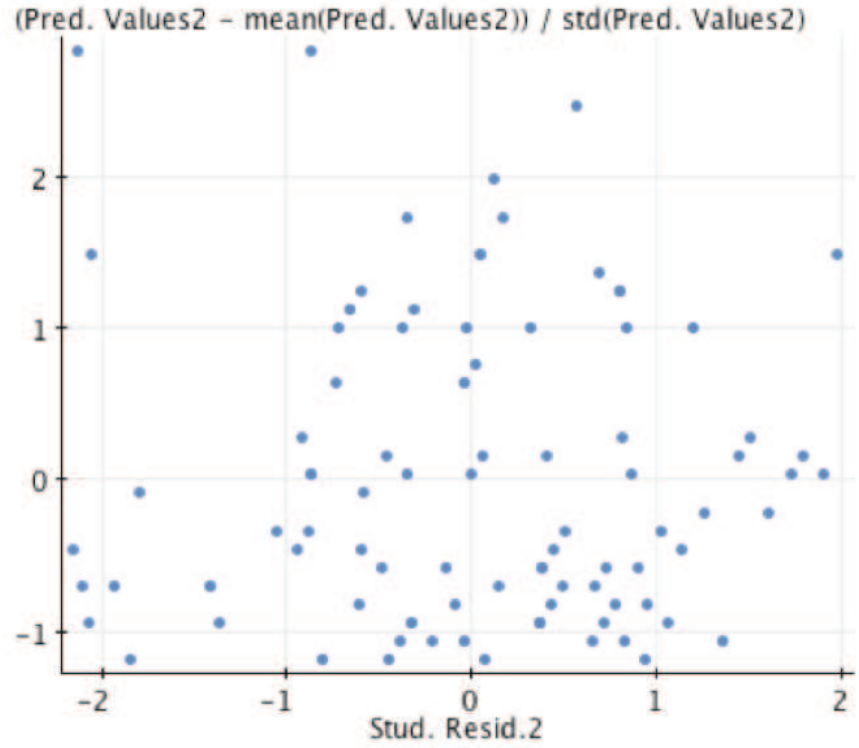
PROJECT ANALYSIS 8



PROJECT ANALYSIS 9



PROJECT ANALYSIS 10: The Y-Axis is the Standardized Predicted Values and the X-Axis is the Studentized Residuals



PROJECT ANALYSIS 11

Multiple linear regression results:
Dependent Variable: Post Sch
Independent Variable(s): Pre Bully, Post Bully

Parameter Estimates

Variable	Estimate	Std. Err.	Tstat	P-value
Intercept	17.284027	0.9995719	17.29143	<0.0001
Pre Bully	0.42196068	0.10427649	4.046556	0.0001
Post Bully	0.364258	0.12499599	2.9141574	0.0045

Analysis of variance table for multiple regression model:

Source	DF	SS	MS	F-stat	P-value
Model	2	2744.4321	1372.2161	44.05322	<0.0001
Error	87	2709.9678	31.149055		
Total	89	5454.4			

Summary of fit:
Root MSE: 5.581134
R-squared: 0.5032
R-squared (adjusted): 0.4917