

Elementary School Beginning Teacher Percentages and Teacher

Salary: Accountability Rating Differences

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Research Questions

In this study, the following research questions were addressed: (a) What is the difference in beginning teacher percentages between Exemplary elementary schools and Academically Unacceptable elementary schools?; and (b) What is the difference in beginning teacher salary between Exemplary elementary schools and Academically Unacceptable elementary schools?

Results

The average percent of beginning teachers employed at Texas Exemplary elementary schools was 5.26%, compared to an average of 11.94% beginning teachers employed at Texas Academically Unacceptable elementary schools. Concerning the average teacher salary of beginning teachers, the mean salary was \$40,080.06 for beginning teachers at Exemplary elementary schools whereas the mean salary was \$38,414.98 for beginning teachers at Academically Unacceptable elementary schools. Readers are referred to Table 1 for the descriptive statistics concerning these variables.

Prior to conducting inferential statistics to determine whether differences were present between Exemplary and Academically Unacceptable elementary schools in their beginning teacher percentages and beginning teacher salaries, checks were conducted to determine the extent to which the data were normally distributed. Of the standardized skewness coefficients (i.e., the skewness value divided by its standard error) and the standardized kurtosis coefficients (i.e., the kurtosis value divided by its standard error), all were within the limits of normality, +/-

3 (Onwuegbuzie & Daniel, 2002). Accordingly, parametric independent samples *t*-tests were conducted to answer the two research questions.

The independent samples *t*-test revealed a statistically significant difference between Exemplary elementary schools and Academically Unacceptable elementary schools in their percent of beginning teachers, $t(49.46) = -4.58, p < .001$. This difference represented a large effect size (Cohen's *d*) of 0.83 (Cohen, 1988). Academically Unacceptable elementary schools had a statistically significantly higher percentage of beginning teachers, more than twice as high, than did Exemplary elementary schools.

Regarding beginning teacher salary, the independent samples *t*-test revealed a statistically significant difference between Exemplary elementary schools and Academically Unacceptable elementary schools, $t(50.47) = 2.11, p = .04$. This difference represented a small effect size (Cohen's *d*) of 0.31 (Cohen, 1988). Exemplary elementary schools had a statistically significantly higher teacher salary for beginning teachers, \$1,665.08 higher, than the beginning teacher salary at Academically Unacceptable elementary schools.

References

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools*, 9(1), 73-90.

Table 1

Standardized Skewness Coefficients and Standardized Kurtosis Coefficients for Percent of Beginning Teachers and Average Salary of Beginning Teachers

Variable	Standardized Skewness Coefficient	Standardized Kurtosis Coefficient
Percent of Beginning Teachers		
Exemplary	1.52	1.78
Unacceptable	2.52	1.34
Average Salary of Beginning Teachers		
Exemplary	-1.38	1.55
Unacceptable	1.92	0.57

Table 2

Descriptive Statistics for Percent of Beginning Teachers and Average Salary of Beginning Teachers

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
Percent of Beginning Teachers			
Exemplary	839	5.26	5.15
Unacceptable	49	11.94	10.13
Average Salary of Beginning Teachers			
Exemplary	647	\$40,080.06	\$5,576.37
Unacceptable	44	\$38,414.98	\$5,027.47

Appendix

SPSS Statistical Output

Statistics

Accountability Ratings - Extremes			Average Salary of Beginning Teachers	Percent of Beginning Teachers
Exemplary Elementary Schools	N	Valid	647	839
		Missing	193	1
	Mean		40080.06	5.2603
	Std. Deviation		5576.369	5.14837
	Skewness		-.132	.583
	Std. Error of Skewness		.096	.384
	Kurtosis		.454	.837
	Std. Error of Kurtosis		.292	.469
Academically Unacceptable Elementary Schools	N	Valid	44	49
		Missing	6	1
	Mean		38414.98	11.9416
	Std. Deviation		5027.468	10.12902
	Skewness		-.685	.856
	Std. Error of Skewness		.357	.340
	Kurtosis		-.403	.893
	Std. Error of Kurtosis		.702	.668

Independent Samples Test for Percent of Beginning Teachers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Percent of Beginning Teachers	Equal variances assumed	38.145	.000	-8.214	886	.000	-6.68128	.81337	-8.27763	-5.08492
	Equal variances not assumed			-4.583	49.459	.000	-6.68128	1.45788	-9.61030	-3.75225

Independent Samples Test for Beginning Teacher Salary

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Average Salary of Beginning Teachers	Equal variances assumed	.010	.920	1.928	689	.054	1665.078	863.695	-30.712	3360.869
	Equal variances not assumed			2.110	50.473	.040	1665.078	788.989	80.715	3249.441