EPRS 8530 Educational Statistics I: Project 2 Susan Ferrell Fall 2006

The Impact of a Field Experience on Understanding of At-Risk Students

Description:

All preservice middle school teachers at ABC College and State University are required to take EDUC 3010 – Educational and Community Based Interventions for Students At-Risk. The class utilizes the most basic definition of *at risk: those students who are at risk of failing or not completing high school*. The course is taught during fall semester to senior preservice middle grades education majors who are also enrolled in a field experience (Block placement) which requires them to spend ½ day in their assigned school. The Block field placement is the last field placement before the students go into their final internship/student teaching experience. During the Block placement, preservice middle school teachers spend a minimum 200 hours in their assigned school.

During the fall of 2006, eleven of the preservice middle grades teachers were placed in a field experience at School B which has a large population of at-risk students. For this study, the term *at-risk* is operationalized by poverty level as indicated by the percentage of students who received free or reduced lunch. At School B, 60% of the students received free and reduced price lunches. The remaining eleven students were place at School A where 15% of students received free and reduced price lunches. Therefore, more students at School B qualified as living in poverty than those at School A. The purpose of this study was to determine if preservice teachers who participated in a field experience at a school with larger numbers of students who are at-risk gained more knowledge of students at risk than those preservice teachers who participated in a field experience in a school with fewer numbers of students at risk.

Methods:

The class met twice a week for 1 and ½ hours per session. Preservice teachers were given a posttest at the end of the field experience. All students were exposed to the same methods and materials during the in class time. Therefore, the independent variable was the nature of the field experience. The means of posttest scores for preservice teachers placed at School A and School B were compared to determine if there was a significant difference. Since the posttest measurements for Group 1/School A and Group 2/School B were unrelated to each other, an independent t-test was performed.

The Null and Alternative Hypothesis:

The null hypothesis for this study is that there will be no significant difference between the means of the posttest scores for preservice teachers placed at School A and School B.

Results:

Table 1 presents the means and standard deviation by group. Group 1 represents the posttest scores of those preservice students place at School A. Group 2 represents the posttest scores for preservice teacher place at School B. The results show that preservice

students who completed a field experience at School B averaged about 3.43 points higher on the posttest. The standard deviation for Group 1 was 1.48324 and the standard deviation for Group 2 was 2.03891, thus there was more homogeneity of posttest scores for Group1/School A. Equal variances are assumed (Levene's test F= 2.406, p=.129). We reject the null hypothesis of equal means and conclude that the difference between the two averages is significant, (t (.05, 40) = -6.231, p < .001).

Group Statistics – Table 1

	School	N	Mean	Std. Deviation	Std. Error Mean
posttest	School A	21	19.0000	1.48324	.32367
	School B	21	22.4286	2.03891	.44493

Independent Samples Test – Table 2

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2- tailed)	Mean Differenc e	Std. Error Differenc e	95% Co Interva Diffe Lower	nfidence Il of the rence Upper	
posttes t	Equal variances assumed Equal variances not assumed	2.406	.129	-6.231 -6.231	40 36.537	.000 .000	-3.42857 -3.42857	.55020 .55020	-4.54057 -4.54386	-2.31657 -2.31328	

Discussion/Conclusions:

Although the sample size for this experiment was small (n=22), the results of this study indicate that those students enrolled in EDUC 3010 might actually learn more about students at risk for failing or dropping out of school if they have a co-requisite requirement of a field placement in a school with high numbers of at risk students. A larger sample would provide more accurate information as would replication of the experiment at other schools. It is also important to remember that living in poverty does not necessarily place a student at risk. Students who come from backgrounds of poverty do not always fail or drop out of school. Operationalizing the term *at risk* in other ways, such as ethnic group or gender, might prove useful in determining what situations actually do inform preservice teachers with regard to students labeled at risk. However, this study does provide some indication that placing preservice teachers in schools with higher numbers of at risk students might prepare them to be more effective educators for students who are at risk. The argument could be made to place all preservice teachers in schools where they will have more frequent interaction with students at risk.