Subjects were undergraduate students at East Carolina University who were enrolled in Dr. Karl Wuensch’s comparative psychobiology class (*n* = 200). Half of the students were labeled the experimental groups and taught a novel studying technique, and half were labeled the control group and taught to knit. Each student was instructed to log of how many hours they spent either studying for the class or knitting (TIME). Each student completed a standardized final examination in comparative psychobiology, resulting in a score (EXAM).

A Potthoff analysis (simultaneous test of slope of intercept) was conducted to determine whether the slopes and intercepts for predicting EXAM from TIME differed between the experimental and control group.The analysis revealed that the regression lines for the two groups were not coincident, *F*(2, 196) = 1236.37, *p* < .001.Follow-up analyses revealed that the two groups did differ significantly in slopes, *t*(196) = 4.26, *p* < .001, as well as in intercepts, *t*(196) = 3.02, *p* = .003. As shown in Figure 1, the slope for predicting EXAM from TIME was significant in both the experimental group (.24), 95% CI [.19, .29], and in the control group (.08), 95% CI [,03, .13].

Figure 1. Predicting Exam scores from Time devoted to study in Control and Experimental group  
